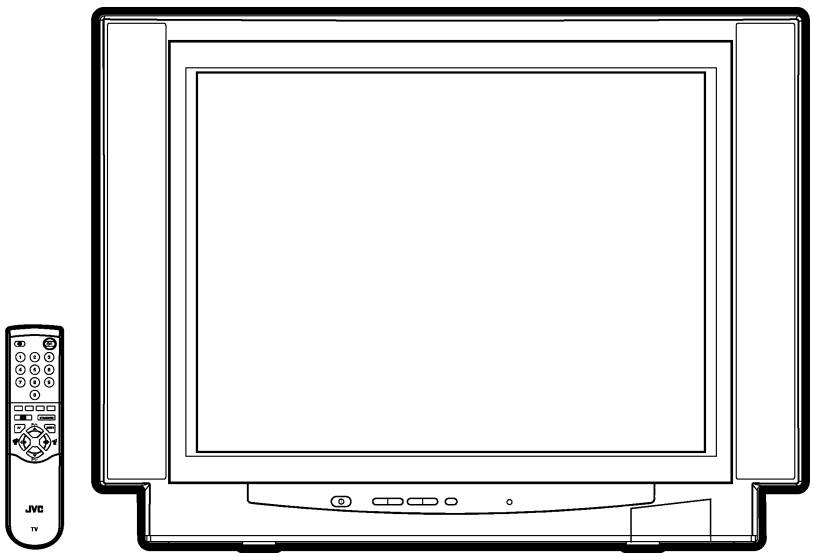
AV28BT7ENS / AV28BT7ENB
AV28BT7EES / AV28BT7EEB
AV28BT7EPS / AV28BT7EPB

JVC

SERVICE MANUAL

COLOUR TELEVISION

AV28BT7ENS / AV28BT7ENB
AV28BT7EES / AV28BT7EEB
AV28BT7EPS / AV28BT7EPB



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AV28BT7ENS / AV28BT7ENB
AV28BT7EES / AV28BT7EEB
AV28BT7EPS / AV28BT7EPB

SPECIFICATIONS

ITEM		Content		
		AV28BT7ENS (Silver) AV28BT7ENB (Black)	**AV28BT7EES (Silver) AV28BT7EEB (Black)**	**AV28BT7EPS (Silver) AV28BT7EPB (Black)**
Dimensions (WxHxD)		77 x 58 x 48 cm		
Weight		33.2 kg		
TV RF System		B/G	B/G, D/K, K1	B/G, L/L'
Colour System	**TV Mode**	PAL	PAL / SECAM	←
	Video Mode	PAL / NTSC 3.58 / NTSC 4.43	PAL / SECAM / NTSC 3.58 / NTSC 4.43	←
Teletext System		Fastext / Toptext		
Stereo System		A2 / German + NICAM		
Tuning System		Frequency Synthesizer Tuning System		
Number Of CH memory position		100 ch		
Receiving Frequency	**VHF (VL)**	46.25MHZ ~ 168.25MHz		
	VHF (VH)	175.25MHz ~ 463.25MHz		
	UHF	471.25MHz ~ 863.25MHz		
	CATV	Super (S11-S20) & Hyper (S21-S41) bands receivable		
Intermediate Frequency	**VIF Carrier**	38.9MHz		
	SIF Carrier	32.4MHz (6.5MHz)		
		32.9MHz (6.0MHz)		
		33.4MHz (5.5MHz)		
Colour Sub Carrier Frequency		PAL (4.43MHz), SECAM (4.43MHz), NTSC (3.58MHz/4.43MHz)		
Aerial Input Terminal		75Ohm Unbalanced		
Power Input		AC 220 ~ 240V, 50Hz		
Power Consumption		120W(Max.)/103W(Avg.)		
Picture Tube		28 inch measured diagonally		
High Voltage		28kV (in cut-off service mode)		
Speaker		57 ×160 mm ellipse type ×2		
Audio Output		8W + 8W		
Input	**Video**	1Vp-p, 75 Ohm		
	S/Video	Y: 1Vp-p Positive C: 0.286Vp-p		
	Audio (L/R)	500 mVrms, High Impedance		
Output	**Video**	1 Vp-p, 75 Ohm		
	Audio (L/R)	500 mVrms, Low Impedance		
Input Terminal	**Rear Side**	AV1 (Video/Audio/RGB)		
		AV2 (Video/Audio/S-VHS)		
	Front Side	AV3 (Video/Audio)		
Output Terminal	**Front Side**	Headphone jack (Stereo mini jack 3.5∅)		
	Rear Side	AV1 (Video/Audio)		
		AV2 (Video/Audio) (Selected TV, AV1 or AV3)		
Remote Control Unit		RM-C85, Battery size:AAA/R03 x 2		

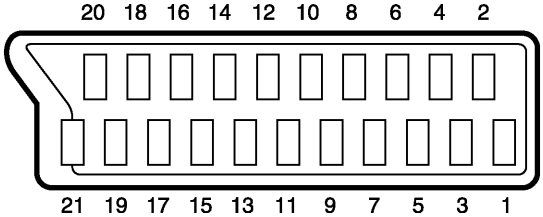
Design & specifications are subject to change without notice.

■21-pin Euro connector (SCART socket) : AV-1 / AV-2

(P-P= Peak to Peak, S-W= Sync tip to white peak, B-W= Blanking to white peak)

Pin No.	Signal Designation	Matching Value	AV-1	AV-2
1	AUDIO R output	500mVrms(Nominal),Low impedance	○ (TV OUT)	○ (TV/LINE OUT)
2	AUDIO R input	500mVrms(Nominal),High impedance	○	○
3	AUDIO L output	500mVrms(Nominal),Low impedance	○ (TV OUT)	○ (TV/LINE OUT)
4	AUDIO GND		○	○
5	GND (B)		○	○
6	AUDIO L input	500mVrms(Nominal), High impedance	○	○
7	B input	700mV$_{B-W}$, 75Ω	○	NC
8	FUNCTON SW (SLOW SW)	Low : 0-3V, High : 8-12V, High impedance	○	NC
9	GND (G)		○	○
10	-		NC	-
11	G input	700mV$_{B-W}$, 75Ω	○	NC
12	-		NC	-
13	GND (R)		○	○
14	GND (YS)		○	NC
15	R / C input	R : 700mV$_{B-W}$, 75Ω C : 300mV$_{P-P}$, 75Ω	○ (R/C)	○ (only C)
16	Ys input	Low : 0 – 0.4, High : 1 - 3V, 75Ω	○	NC
17	GND(VIDEO output)		○	○
18	GND(VIDEO input)		○	○
19	VIDEO output	1V$_{S-W}$(Negative going sync), 75Ω	○ (TV)	○ (TV/LINE OUT)
20	VIDEO / Y input	1V$_{S-W}$(Negative going sync), 75Ω	○	○
21	COMMON GND		○	○

[Pin assignment]



SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE side GND, the ISOLATED(NEUTRAL) side GND and EARTH side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

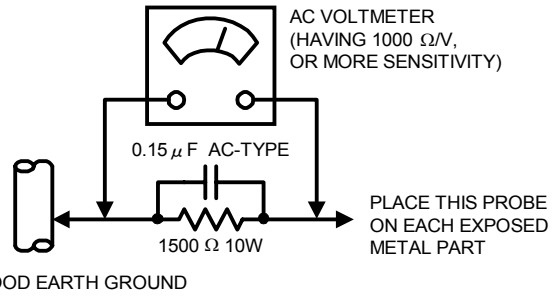
8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

9. **Isolation Check**
   (Safety for Electrical Shock Hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

● **Alternate Check Method**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



FEATURES

1. It is a remte controlled color television.
2. 100 programs from VHF, UHF bands or cable channels can be preset.
3. It can tune cable channels.
4. Controlling the TV is very easy by its menu driven system.
5. It has two Euroconnector sockets for external device (such as video recorder, video games, audio set, etc.)
6. Front AV Input available.
7. Stereo sound systems (German + Nicam) are available.
8. Full function Teletext (Fastext, Toptext).
9. It is possible to connect headphone.
10. Direct channel access.
11. APS (Automatic Programming System).
12. All programs can be named.
13. Forward or backward automatic tuning.
14. Automatic sound mute when no transmission.
15. 5 minutes after the broadcasting (closedown), the TV switches itself automatically to stand-by mode.

MAIN DIFFERENCE LIST

MODEL No. / Parts Name		AV28BT7ENS (Silver)	AV28BT7ENB (Black)	AV28BT7EES (Silver)	AV28BT7EEB (Black)	AV28BT7EPS (Silver)	AV28BT7EPB (Black)
MAIN PWB		VE-20073586	←	VE-20073447	←	VE-20081473	←
F CARTON BOX		VE-20083462	VE-20083400	VE-20083464	VE-20083469	VE-20083471	VE-20083484
INST BOOK		VE-20083463	VE-20083402	VE-20083466	VE-20083468	VE-20083470	VE-20083483
RATING LABEL		VE-20083403	VE-20083401	VE-20083465	VE-20083467	VE-20083482	VE-20083485
FRONT CABINET		VE-20082289	VE-20081489	VE-20082289	VE-20081489	VE-20082289	VE-20081489
BACK COVER		VE-20082322	VE-20069017	VE-20082322	VE-20069017	VE-20082322	VE-20069017
TV RF system		B/G	←	B/G, D/K,K1	←	B/G,L/L'	←
Colour system	TV	PAL	←	PAL / SECAM	←	←	←
	VIDEO	PAL NTSC 3.58 NTSC 4.43	←	PAL / SCAM NTSC 3.58 NTSC 4.43	←	←	←

SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Remove the **8** screws marked **A**.
2. Withdraw the rear cover toward you.

REMOVING THE FRONT AV + HEADPHONE JACK BOARD ASS'Y

- After removing the rear cover.

1. Remove the **2** screws marked **B**, and remove the FRONT AV + HEADPHONE JACK BOARD ASS'Y.

REMOVING THE FRONT CONTROL PWB

- After removing the rear cover.

1. Remove the MAIN PWB ASS'Y.
2. Remove the **5** screws marked **C**, and remove the FRONT CONTROL PWB.

REMOVING THE SPEAKER

- After removing the rear cover.

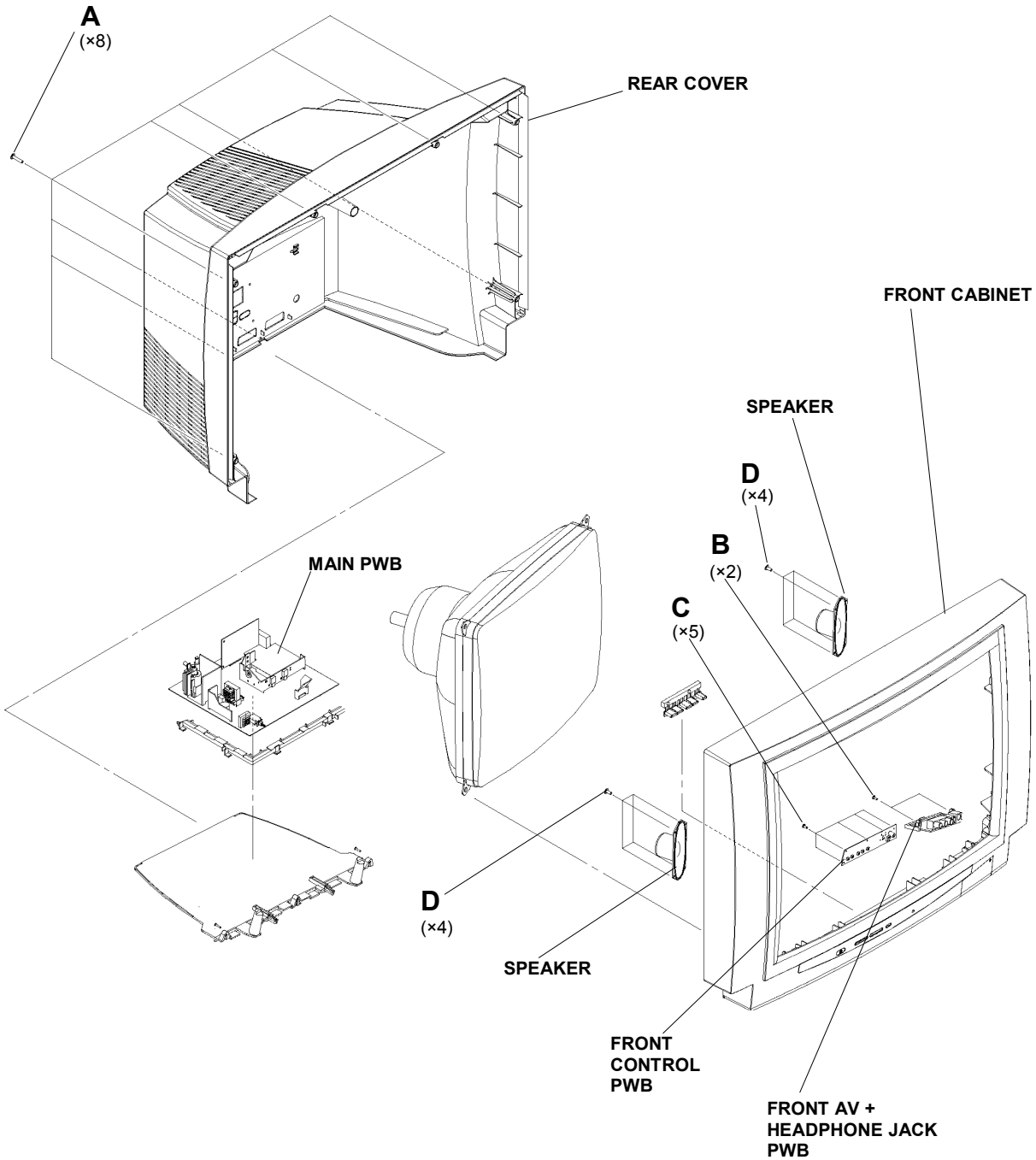
1. Remove the **4** screws marked **D**, and remove the SPEAKER.
2. Remove an opposite side similarly.

REMOVING THE MAIN PWB

- After removing the rear cover.

1. Draw out back and remove the MAIN PWB ASS'Y,

CAUTIONS)
Be careful enough when developing a main chassis.
The wire of a POWER TRANSFER does not separate and short-circuit with other parts.


A
(×8)
REAR COVER
FRONT CABINET
SPEAKER
D
(×4)
B
(×2)
C
(×5)
MAIN PWB
D
(×4)
SPEAKER
FRONT
CONTROL
PWB
FRONT AV +
HEADPHONE JACK
PWB

SETTING OF THE LAST MEMORY FOR SHIPMENT

■ USER SETTING VALUES

<table>
<tr><th>Setting Item</th><th>Setting Value</th><th>Setting Item</th><th>Setting Value</th></tr>
<tr><td colspan="2">SOUND MENU</td><td colspan="2">FEATURE MENU</td></tr>
<tr><td>BASS</td><td>CENTER</td><td>SLEEP TIMER</td><td>OFF</td></tr>
<tr><td>TREBLE</td><td>↑</td><td>CHILD LOCK</td><td>OFF</td></tr>
<tr><td>BALANCE</td><td>↑</td><td colspan="2" rowspan="2"></td></tr>
<tr><td>EFFECT</td><td>OFF</td></tr>
<tr><td colspan="2">PICTURE MENU</td><td colspan="2">INSTALL-> TV CONFIG. MENU</td></tr>
<tr><td>BRIGHTNESS</td><td rowspan="5">These adjust are automatically restored when APS bit in Service menu is set.
The procedure for setting APS bit is described bellow.</td><td>LANGUAGE</td><td>ENGLISH</td></tr>
<tr><td>COLOUR</td><td>COUNTRY</td><td>?</td></tr>
<tr><td>CONTRAST</td><td>AV-2 OUTPUT</td><td>TV</td></tr>
<tr><td>SHARPNESS</td><td colspan="2" rowspan="2"></td></tr>
<tr><td>HUE (only NTSC)</td></tr>
<tr><td>PICTURE MODE</td><td>AUTO</td><td colspan="2"></td></tr>
</table>

■ SETTING APS BIT IN SERVICE MENU

1) Enter service menu in TV mode by pressing “INFO” and “MUTING” keys simultaneously. Service Menu will appear.
2) Select OPTIONS by pressing Up/Down keys on remote control unit.
3) Enter OPTIONS by pressing Left/Right keys on remote control unit.
4) Select OPTION 8 by pressing Up/Down keys on remote control unit.
5) Selected bit in one OPTION is shown by blinking character. Select B2 by pressing Left/Right keys on remote control unit.
   DO NOT CHANGE ANY OTHER BIT.
6) Press digit key “1” to set APS bit.
7) Press “STANDARD” key on remote control unit to exit service mode.

SERVICE ADJUSTMENTS

ADJUSTMENT PREPARATION

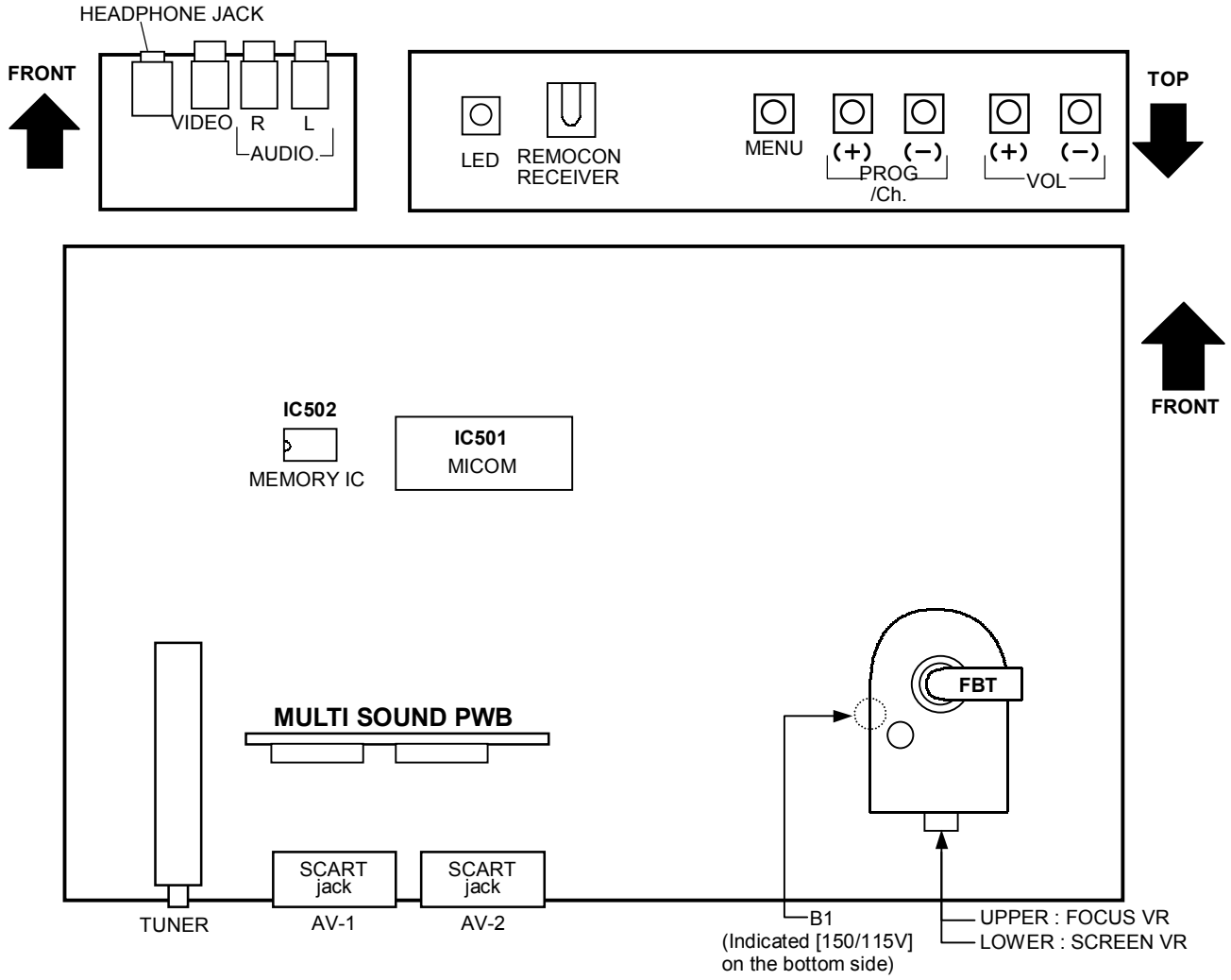
1. **You can make the necessary adjustments for this unit with either the Remote Control Unit or With the adjustment tools and parts as given below.**
2. **Adjustment with the Remote Control Unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.**
3. Make sure that AC power is turned on correctly.
4. Turn on the power for set and test equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
5. Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
6. Never touch any adjustment parts which are not specified in the list for this adjustment - variable resistors, transformers, condensers, etc.
7. Presetting before adjustment.
   Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit:

VIDEO STATUS	STANDARD
TINT/COLOR	CENTER
PICTURE/BRIGHT	
DETAIL	

ADJUSTMENT EQUIPMENT

1. DC voltmeter (or digital voltmeter)
2. Signal generator (Pattern generator) [PAL/SECAM/NTSC]
3. Remote control unit

MAIN PARTS LOCATIONS



BASIC OPERATION SERVICE MENU

■ HOW TO ENTER THE SERVICE MODE

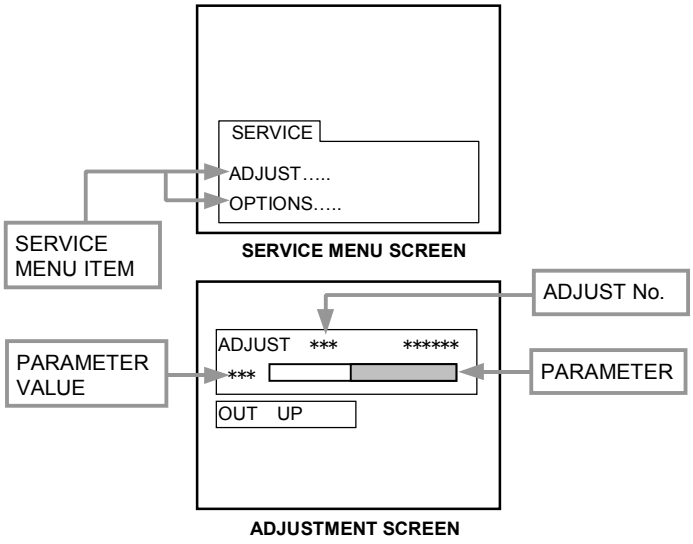
1) Press the **INFORMATION** key and **MUTING** key of REMOTE CONTROL UNIT simultaneously.

■ SELECTION OF ADJUSTMENT ITEMS

1) Press the **UP** (▲) or **DOWN** (▼) key and select the service menu item.
2) Press the **RIGHT** (▶) or **LEFT** (◀) key and enter ADJUSTMENT SCREEN.
3) Select the ADJUST No., use **RIGHT** (▶) / **LEFT** (◀) key of remote control unit.
4) To change the selected parameter, use **RIGHT** (▶) and **LEFT** (◀) key.

■ HOW TO EXIT SERVICE MODE

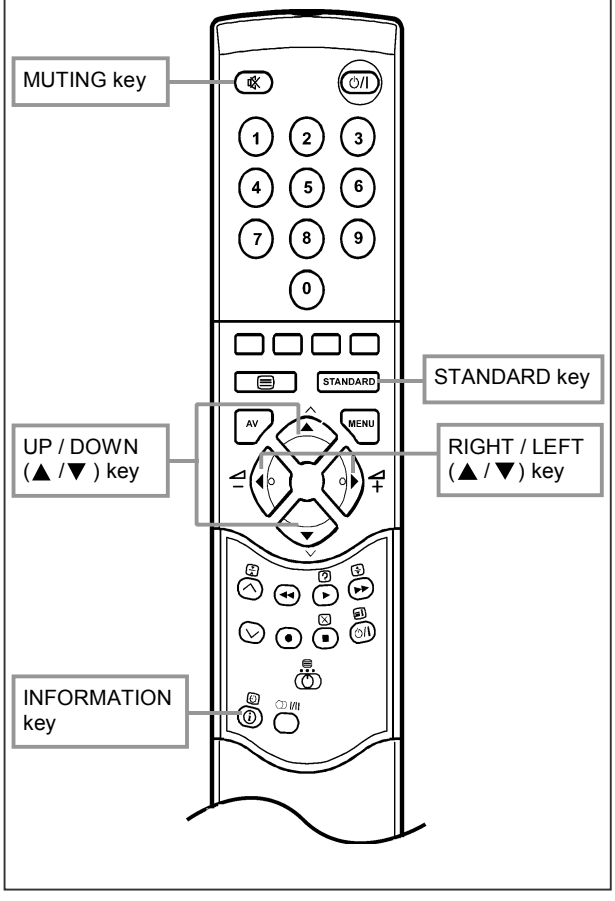
1) Press the **STANDARD** Key on REMOTE CONTROL UNIT.



■ ADJUSTMENT SERVICE MENU

ADJUSTMENT ITEM	ADJUST No.	DISCRIPTION
WHITE BALANCE	00	White Point RED
	01	White Point GREEN
	02	White Point BLUE
AGC	03	AGC
IF-PLL NEGATIVE	04	IF-PLL Negative
IF-PLL POSITIVE	05	IF-PLL Positive
LUMINANCE DELAY	06	Y-Delay PAL
	07	Y-Delay SECAM
	08	Y-Delay NTSC
VERTICAL ZOOM	10	4 : 3 PICTURE MODE
	21	16 : 9 PICTURE MODE
VERTICAL SCROLL	11	4 : 3 PICTURE MODE
	22	16 : 9 PICTURE MODE
4 : 3 HORIZONTAL SHIFT	12	4 : 3 PICTURE MODE
	23	16 : 9 PICTURE MODE
VERTICAL SLOPE	13	4 : 3 PICTURE MODE
	24	16 : 9 PICTURE MODE
VERTICAL AMPLITUDE	14	4 : 3 PICTURE MODE
	25	16 : 9 PICTURE MODE
S-CORRECTION	15	4 : 3 PICTURE MODE
	26	16 : 9 PICTURE MODE
VERTICAL SHIFT	16	4 : 3 PICTURE MODE
	27	16 : 9 PICTURE MODE
EW WIDTH	17	4 : 3 PICTURE MODE
	28	16 : 9 PICTURE MODE
EW PARABOLA WIDTH	18	4 : 3 PICTURE MODE
	29	16 : 9 PICTURE MODE
EW CORNER PARABOLA	19	4 : 3 PICTURE MODE
	30	16 : 9 PICTURE MODE
EW TRAPEZIUM	20	4 : 3 PICTURE MODE
	31	16 : 9 PICTURE MODE

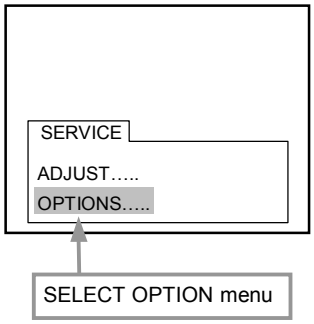
REMOTE CONTROL UNIT key NAME



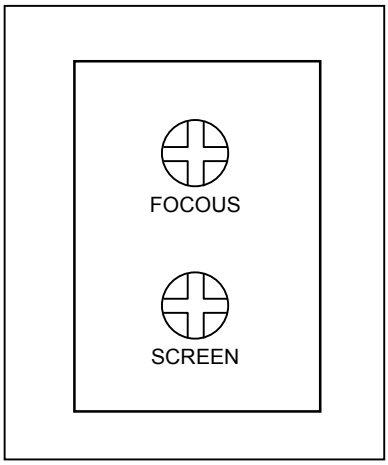
ADJUSTMENTS

Item	Measuring instrument	Test point	Adjustment part	Description
SCREEN VOLTAGE Adjustment	**Signal Generator** **Remote Control unit**		**SCREEN VR [FBT]** **OPTION 02**	1. Receive a **PAL** colour bar. 2. Enter the option settings in the SERVICE MENU. 3. Press the UP / DOWN (▲/ ▼) key, and Enter **Option 02**. 4. To change bit 6, come on to it by using L / R (◀/▶) key and make it "1" by pressing "1" white bit 2 is blinking. 5. Observe the thin horizontal blue-white line in the middle of the screen, and adjust the lower VR of the FBT, until the line is in its thinnest visible thickness. 6. Then make Option 02 bit 6 "0" , by pressing "0" on the remote control unit, although you do not see any picture.
FOCUS Adjustment	**Signal generator**		**FOCUS VR [FBT]**	1. Receive a **PAL** circle pattern. 2. Adjust the upper VR of the FBT, until you get the Optinum focus, the sharpest picture.
B1 VOLTAGE check	**DC Voltmeter**	**Marked [150/115V] on the MAIN PWB**		1. Check whether the voltage at the point named and silk screened as "150 / 115V" on the MAIN PWB is 150V DC.

SERVICE MENU



FBT



Item	Measuring instruments	Test point	Adjustment part	Description
WHITE BALANCE	**Signal generator**		**ADJUST 00 (White point - RED)** **ADJUST 01 (White point - GREEN)** **ADJUST 02 (White point - BLUE)**	**[LOW LIGHT]** 1. Receive a whole black signal. 2. Adjust the <Adjust 00>, <Adjust 01>, <Adjust 02>, in the SERVICE MENU so that the entire screen do not shine black. **[HIGH LIGHT]** 1. Receive a white and black signal (colour off). 2. Adjust the <Adjust 00>, <Adjust 01>, <Adjust 02>, in the SERVICE MENU so that the whiteness in the screen become sharp.
AGC Adjustment	**DC voltmeter**		**ADJUST 03**	1. Receive a any broadcast. 2. Select **<ADJUST 03>** from SERVICE MENU 3. Connect a DC voltmeter to pin 1 of the tuner. Change the AGC parameter until you see 3.70V DC on voltmeter display.
IF-PLL NEGATIVE Adjustment			**ADJUST 04**	1. Select **<ADJUST 04>** from SERVICE MENU. 2. Adjustment value is set to 80 as a default value.
IF-PLL POSITIVE Adjustment			**ADJUST 05**	1. Select **<ADJUST 05>** from SERVICE MENU. 2. Adjustment value is set to 80 as a default value.

Item	Measuring instruments	Test point	Adjustment part	Description
LUMINANCE DELAY Adjustment	**Signal generator**		**Adjust 06**	**[Y-Delay PAL]** 1. Receive a **PAL** colour bar signal. 2. Select **<Adjust 06>** from SERVICE MENU. 3. Adjust Y-Delay PAL till the colour transients on the colour bar of the pattern become as sharper and colours between transients do not mix with each other as possible. Note: If the SAW filter is one of the G1965M, J1951M, K2958M, K2962M, G3957M, K6256K, K6259K or M1963M, there is constant group delay distortion, so for an equal delay of the luminance and chrominance signal the delay must be set at a value of 160nS. This means the adjustment must be set to the maximum value.
			Adjust 07	**[Y-Delay SECAM]** 1. Receive a **SECAM** colour bar signal. 2. Select **<Adjust 07>** from SERVICE MENU. 3. Adjust **Y-Delay SECAM** till the colour transients on the colour bar of the pattern become as sharper and colours between transients do not mix with each other as possible. Note: If the SAW filter is one of the G1965M, K2958M, K2962M, G3957M, K6256K or K6259K, there is constant group delay distortion, so for an equal delay of the luminance and chrominance signal the delay must be set at a value of 160nS. This means the adjustment must be set to the maximum value.
			Adjust 08	**[Y-Delay NTSC]** 1. Receive a **NTSC** colour bar signal. 2. Select **<Adjust 08>** from SERVICE MENU. 3. Adjust **Y-Delay NTSC** till the colour transients on the colour bar of the pattern become as sharper and colours between transients do not mix with each other as possible. Note: If the SAW filter is M1963M, there is constant group delay distortion, so for an equal delay of the luminance and chrominance signal the delay must be set at a value of 160nS. This means the adjustment must be set to the maximum value.

Item	Measuring instruments	Test point	Adjustment part	Description
VERTICAL ZOOM Adjustment	**Signal generator**		**Adjust 10 (4 : 3)** **Adjust 21 (16 : 9)**	1. Receive a **PAL** circle test pattern. 2. Set **< 4 : 3 aspect mode >**. 3. Select **< ADJUST 10 >** from SERVICE MENU. 4. Change vertical zoom till you see the upper and olwer limit of the circle as close to the upper and lower limit of the picture tube as possible. 5. Set **< 16 : 9 aspect mode >**. 6. Adjusts with the step which is the same above from 3 to 4 about the 16 : 9 aspect mode, too.
VERTICAL SCROLL Adjustment	**Signal generator**		**Adjust 11 (4 : 3)** **Adjust 22 (16 : 9)**	1. Receive a **PAL** circle test pattern. 2. Set **< 4 : 3 aspect mode >**. 3. Select **< ADJUST 11 >** from SERVICE MENU. 4. Change vertical scroll till you see the circle exactly un the middle of the screen. 5. Set **< 16 : 9 aspect mode >**. 6. Adjusts with the step which is the same above from 3 to 4 about the 16 : 9 aspect mode, too.
4 : 3 HORIZONTAL SHIFT Adjustment	**Signal generator**		**Adjust 12 (4 : 3)** **Adjust 23 (16 : 9)**	1. Receive a **RED PURITY** test pattern. 2. Set **< 4 : 3 aspect mode >**. 3. Select **< ADJUST 12 >** from SERVICE MENU. 4. Change horizontal shift till the picture is horizontally centered. Check whether this adjustment is correct after completing Service Mode Adjustment. 5. Set **< 16 : 9 aspect mode >**. 6. Adjusts with the step which is the same above from 3 to 4 about the 16 : 9 aspect mode, too.
VERTICAL SLOPE Adjustment	**Signal generator**		**Adjust 13 (4 : 3)** **Adjust 24 (16 : 9)**	1. Receive a **CROSS-HATCH** signal. 2. Set **< 4 : 3 aspect mode >**. 3. Select **< ADJUST 13 >** from SERVICE MENU. 4. Change vertical slope till the size of squares on both the upper and lower part of test pattern become equal to the squares laying on the vertical centre of the test pattern. 5. Check and readjust VERTICAL SLOPE item if the adjustment becomes improper after some other geometric adjustments are done. 6. Set **< 16 : 9 aspect mode >**. 7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.
VERTICAL AMPLITUDE Adjustment	**Signal generator**		**Adjust 14 (4 : 3)** **Adjust 25 (16 : 9)**	1. Receive a **PAL** test pattern signal. 2. Set **< 4 : 3 aspect mode >**. 3. Select **< ADJUST 14 >** from SERVICE MENU. 4. Change vertical slope till horizontal black lines on both the upper and lower part of the test pattern become very close to the upper and lower horizontal sides of picture tube and nearly about to disappear. 5. Check and readjust VERTICAL AMPLITUDE item if the adjustment becomes improper after some other geometric adjustments are done. 6. Set **< 16 : 9 aspect mode >**. 7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.

Item	Measuring instrument	Test point	Adjustment part	Description
S-CORRECTION Adjustment	**Signal generator**		**Adjust 15 (4 : 3)** **Adjust 26 (16 : 9)**	1. Receive a **PAL** circle pattern signal. 2. Set **< 4 : 3 aspect mode >**. 3. Select **< ADJUST 15 >** from SERVICE MENU. 4. Change S-correction till the middle part of the circle is round as possible. 5. Set **< 16 : 9 aspect mode >**. 6. Adjusts with the step which is the same above from 3 to 4 about the 16 : 9 aspect mode, too.
VERTICAL SHIFT Adjustment	**Signal generator**		**Adjust 16 (4 : 3)** **Adjust 27 (16 : 9)**	1. Receive a **PAL** test pattern signal (or the symmetrical signal in the top and the bottom and on either side to find). 2. Set **< 4 : 3 aspect mode >**. 3. Select **< ADJUST 16 >** from SERVICE MENU. 4. Change Vertical Shift till the test pattern is vertically centred, i.e. horizontal line at the centre pattern is in equal distance both to upper and lower side of the picture tube. 5. Check and readjust Vertical Shift item if the adjustment becomes improper after some other geometric adjustments are done. 6. Set **< 16 : 9 aspect mode >**. 7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.
EW WIDTH Adjustment	**Signal generator**		**Adjust 17 (4 : 3)** **Adjust 28 (16 : 9)**	1. Receive a **PAL** test pattern signal. 2. Set **< 4 : 3 aspect mode >**. 3. Select **< ADJUST 17 >** from SERVICE MENU. 4. Change EW Width till the vertical black and white bars on both left and right side of the pattern exactly disappear. 5. Set **< 16 : 9 aspect mode >**. 6. Adjusts with the step which is the same above from 3 to 4 about the 16 : 9 aspect mode, too.
EW PARABOLA WIDTH Adjustment	**Signal generator**		**Adjust 18 (4 : 3)** **Adjust 29 (16 : 9)**	1. Receive a **PAL** test pattern signal. 2. Set **< 4 : 3 aspect mode >**. 3. Select **< ADJUST 18 >** from SERVICE MENU. 4. Change EW Parabola Width till vertical lines close to the both sides of the picture frame become parallel to vertical side of picture tube. 5. Check and readjust EW Parabola Width item if the adjustment becomes improper after some other geometric adjustments are done. 6. Set **< 16 : 9 aspect mode >**. 7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.
EW CORNER PARABOLA Adjustment	**Signal generator**		**Adjust 19 (4 : 3)** **Adjust 30 (16 : 9)**	1. Receive a **PAL** test pattern signal. 2. Set **< 4 : 3 aspect mode >**. 3. Select **< ADJUST 19 >** from SERVICE MENU. 4. Change EW Corner Parabola till vertical lines at the corners of both sides of picture frame become vertical and parallel to vertical corner sides of picture tube. 5. Check and readjust EW Corner Parabola item if the adjustment becomes improper after some other geometric adjustments are done. 6. Set **< 16 : 9 aspect mode >**. 7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.

Item	Measuring instrument	Test point	Adjustment part	Description
EW TRAPEZIUM Adjustment	**Signal generator**		**Adjust 20 (4 : 3)** **Adjust 31 (16 : 9)**	1. Receive a **PAL** circle pattern signal. 2. Set **< 4 : 3 aspect mode >**. 3. Select **< ADJUST 20 >** from SERVICE MENU. 4. Change EW Trapezium till vertical lines, especially lines at the sides of the picture frame became parallel to the both sides of picture tube as possible. 5. Check and readjust EW Trapezium item if the adjustment becomes improper after some other geometric adjustment. 6. Set **< 16 : 9 aspect mode >**. 7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.

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USING PW BOARD & REMOTE CONTROL UNIT

Model / PWB ASS'Y	AV28BT7ENS AV28BT7ENB	AV28BT7EES AV28BT7EEB	AV28BT7EPS AV28BT7EPB
MAIN PWB	VE-20073586	VE-20073447	VE-20071473
MULTI SOUND PWB	VE-20078991	←	VE-20079020
CRT SOCKET PWB	VE-20074437	←	←
FRONT CONTROL PWB	VE-20001612	←	←
FRONT AV + HEADPHONE JACK PWB	VE-20083646	←	←
PROTECTION MODULE PWB	VE-20058569	←	←
T(SPOT KILLER) MODELE PWB	VE-20019598	←	←
REMOTE CONTROL UNIT	RM-C85	←	←

EXPLODED VIEW PARTS LIST

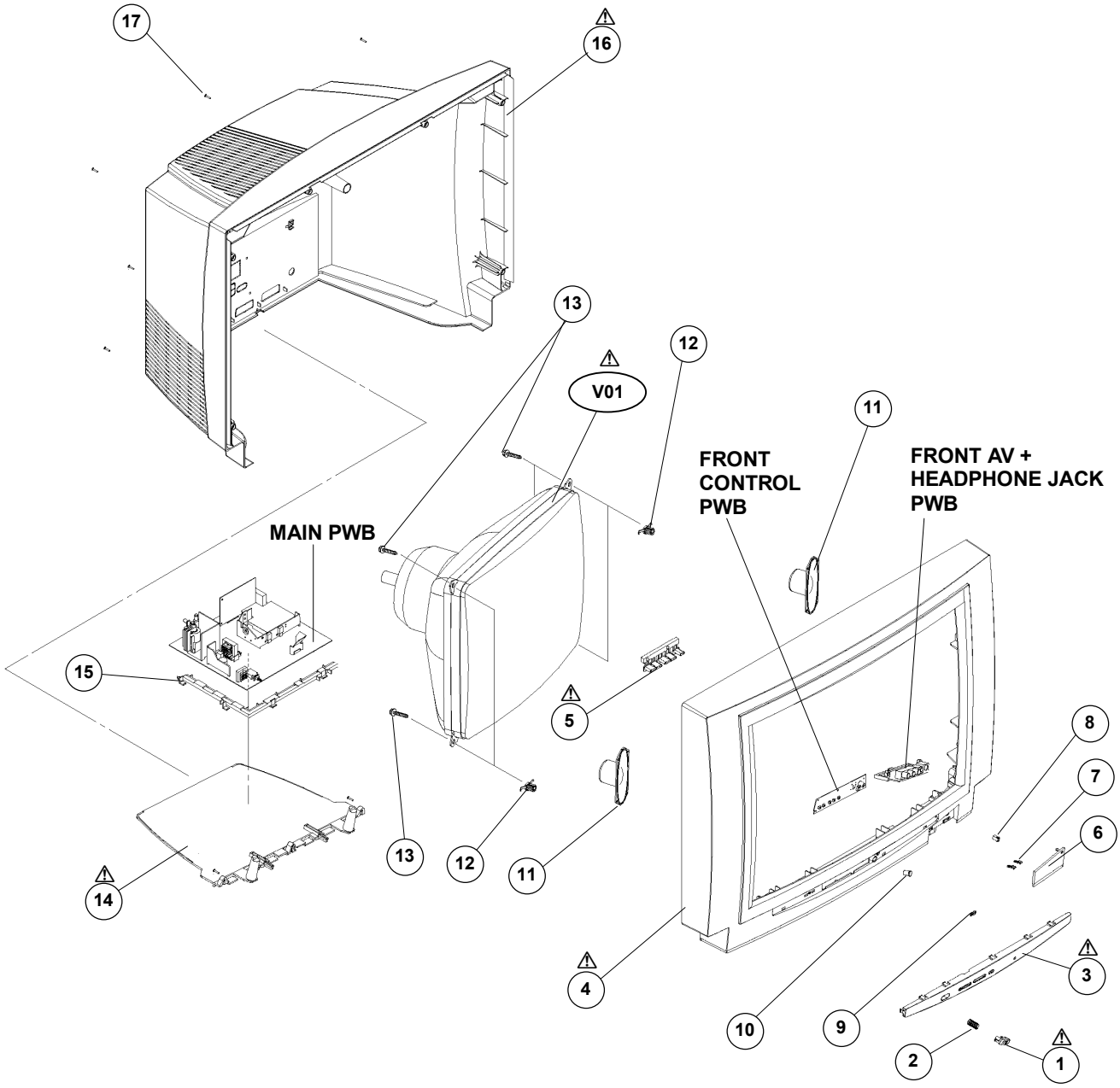
[SILVER model : AV28BT7ENS, AV28BT7EES, AV28BT7EPS]

⚠	Ref.No.	Part No.	Part Name	Description
⚠	V01	VE-30002751	PICTURE TUBE (ITC)	
⚠	1	VE-20074065	POWER KNOB	
	2	VE-35004544	SPRING	
⚠	3	VE-20069218	FRONT PANEL	
⚠	4	VE-20082289	FRONT CABINET	
⚠	5	VE-20083490	BUTTON ASS'Y	
	6	VE-20069213	FRONT AV DOOR	
	7	VE-20003605	PIN (FRONT AV DOOR)	(X2)
	8	VE-40000026	EJECTOR	
	9	VE-20078776	LENS LED	
	10	VE-20004339	LENS PRE-AMP	
	11	VE-30001946	SPEAKER	(X2)
	12	VE-40000108	ADJUSTABLE BOSS CRT	(X4)
	13	VE-35000235	SCREW	(X4)
⚠	14	VE-20078582	BASE	
	15	VE-20004005	SHASSIS FRAME	
⚠	16	VE-20082322	BACK COVER	
	17	VE-35000216	SCREW	(X8)

[BLACK model : AV28BT7ENB, AV28BT7EEB, AV28BT7EPB]

⚠	Ref.No.	Part No.	Part Name	Description
⚠	V01	VE-30002751	PICTURE TUBE (ITC)	
⚠	1	VE-20074065	POWER KNOB	
	2	VE-35004544	SPRING	
⚠	3	VE-20069218	FRONT PANEL	
⚠	4	VE-20081489	FRONT CABINET	
⚠	5	VE-20081484	BUTTON ASS'Y	
	6	VE-20069213	FRONT AV DOOR	
	7	VE-20003605	PIN (FRONT AV DOOR)	(X2)
	8	VE-40000026	EJECTOR	
	9	VE-20078776	LENS LED	
	10	VE-20004339	LENS PRE-AMP	
	11	VE-30001946	SPEAKER	(X2)
	12	VE-40000108	ADJUSTABLE BOSS CRT	(X4)
	13	VE-35000235	SCREW	(X4)
⚠	14	VE-20078582	BASE	
	15	VE-20004005	SHASSIS FRAME	
⚠	16	VE-20069017	BACK COVER	
	17	VE-35000216	SCREW	(X8)

EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST

[AV28BT7ENS / AV28BT7ENB]

MAIN P.W. BOARD ASS'Y (VE-20073586)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R001	VE-30000471	CF RES.	1/4W 10K J
	R001	VE-30000631	SMD RES.	1/10W 2.7K J
	R002	VE-30000471	CF RES.	1/4W 10K J
	R002	VE-30000631	SMD RES.	1/10W 2.7K J
	R003	VE-30000770	CF RES.	1/4W 680R J
	R010	VE-30000797	SMD RES.	1/10W 75R J
	R011	VE-30000480	SMD RES.	1/10W 100K J
	R012	VE-30000480	SMD RES.	1/10W 100K J
	R014	VE-30000477	CF RES.	1/4W 100K J
	R015	VE-30000480	SMD RES.	1/10W 100K J
	R040	VE-30000797	SMD RES.	1/10W 75R J
	R041	VE-30000797	SMD RES.	1/10W 75R J
	R044	VE-30000459	CF RES.	1/4W 100R J
	R045	VE-30000524	SMD RES.	1/10W 150R J
	R049	VE-30000717	SMD RES.	1/10W 470R J
	R050	VE-30000464	SMD RES.	1/10W 100R J
	R051	VE-30000464	SMD RES.	1/10W 100R J
	R065	VE-30000797	SMD RES.	1/10W 75R J
	R066	VE-30000774	SMD RES.	1/10W 680R J
	R067	VE-30000469	SMD RES.	1/10W 1K J
	R068	VE-30000774	SMD RES.	1/10W 680R J
	R069	VE-30000469	SMD RES.	1/10W 1K J
	R070	VE-30000588	SMD RES.	1/10W 220R J
	R071	VE-30000588	SMD RES.	1/10W 220R J
	R072	VE-30000588	SMD RES.	1/10W 220R J
	R073	VE-30000797	SMD RES.	1/10W 75R J
	R075	VE-30000653	SMD RES.	1/10W 33R J
	R078	VE-30000774	SMD RES.	1/10W 680R J
	R079	VE-30000469	SMD RES.	1/10W 1K J
	R080	VE-30000774	SMD RES.	1/10W 680R J
	R081	VE-30000469	SMD RES.	1/10W 1K J
	R082	VE-30000469	SMD RES.	1/10W 1K J
	R083	VE-30000653	SMD RES.	1/10W 33R J
	R084	VE-30000710	SMD RES.	1/10W 47R J
	R094	VE-30000475	SMD RES.	1/10W 10K J
	R095	VE-30000475	SMD RES.	1/10W 10K J
	R096	VE-30000475	SMD RES.	1/10W 10K J
	R097	VE-30000529	SMD RES.	1/10W 1.5K J
	R098	VE-30000475	SMD RES.	1/10W 10K J
	R099	VE-30000475	SMD RES.	1/10W 10K J
	R100	VE-30000727	SMD RES.	1/10W 47K J
	R101	VE-30000471	CF RES.	1/4W 10K J
	R102	VE-30000747	SMD RES.	1/10W 560R J
	R103	VE-30000710	SMD RES.	1/10W 47R J
	R104	VE-30000457	SMD RES.	1/10W 10R J
	R105	VE-30000457	SMD RES.	1/10W 10R J
	R106	VE-30000567	SMD RES.	1/10W 18K J
	R108	VE-30000564	CF RES.	1/4W 18K J
	R200	VE-30000503	SMD RES.	1/10W 12K J
	R201	VE-30000723	CF RES.	1/4W 47K J
	R202	VE-30000459	CF RES.	1/4W 100R J
	R203	VE-30000471	CF RES.	1/4W 10K J
	R208	VE-30000459	CF RES.	1/4W 100R J
	R209	VE-30000459	CF RES.	1/4W 100R J
	R213	VE-30000597	SMD RES.	1/10W 22K J
	R300	VE-30000529	SMD RES.	1/10W 1.5K J
	R303	VE-30000469	SMD RES.	1/10W 1K J
	R304	VE-30000717	SMD RES.	1/10W 470R J
	R305	VE-30000717	SMD RES.	1/10W 470R J
	R306	VE-30000464	SMD RES.	1/10W 100R J
	R307	VE-30000464	SMD RES.	1/10W 100R J
	R308	VE-30000464	SMD RES.	1/10W 100R J
	R309	VE-30000660	CF RES.	1/4W 3.3K J
	R310	VE-30000660	CF RES.	1/4W 3.3K J
	R311	VE-30000531	CF RES.	1/4W 15K J
	R313	VE-30000534	SMD RES.	1/10W 15K J
	R314	VE-30000534	SMD RES.	1/10W 15K J
	R315	VE-30000534	SMD RES.	1/10W 15K J
	R341	VE-30000524	SMD RES.	1/10W 150R J
	R343	VE-30001248	FUSE RES.	1/4W 4.7R J
	R359	VE-30000464	SMD RES.	1/10W 100R J
	R360	VE-30000464	SMD RES.	1/10W 100R J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R361	VE-30000464	SMD RES.	1/10W 100R J
	R364	VE-30000464	SMD RES.	1/10W 100R J
	R378	VE-30000471	CF RES.	1/4W 10K J
	R379	VE-30000475	SMD RES.	1/10W 10K J
	R399	VE-30000717	SMD RES.	1/10W 470R J
	R400	VE-30000717	SMD RES.	1/10W 470R J
	R402	VE-30000706	CF RES.	1/4W 47R J
	R403	VE-30000659	SMD RES.	1/10W 330R J
	R404	VE-30000688	SMD RES.	1/10W 390R J
	R405	VE-30000469	SMD RES.	1/10W 1K J
	R407	VE-30000459	CF RES.	1/4W 100R J
	R418	VE-30000735	SMD RES.	1/10W 4.7R J
	R419	VE-30000710	SMD RES.	1/10W 47R J
	R420	VE-30000593	SMD RES.	1/10W 2.2K J
	R421	VE-30000499	SMD RES.	1/10W 1.2K J
	R422	VE-30000558	SMD RES.	1/10W 180R J
	R426	VE-30000659	SMD RES.	1/10W 330R J
	R428	VE-30000650	CF RES.	1/4W 33R J
	R429	VE-30000524	SMD RES.	1/10W 150R J
	R431	VE-30000459	CF RES.	1/4W 100R J
	R432	VE-30000459	CF RES.	1/4W 100R J
	R433	VE-30000475	SMD RES.	1/10W 10K J
	R437	VE-30000469	SMD RES.	1/10W 1K J
	R438	VE-30000499	SMD RES.	1/10W 1.2K J
	R439	VE-30000499	SMD RES.	1/10W 1.2K J
	R440	VE-30000499	SMD RES.	1/10W 1.2K J
	R446	VE-30000480	SMD RES.	1/10W 100K J
	R447	VE-30000464	SMD RES.	1/10W 100R J
	R448	VE-30000466	CF RES.	1/4W 1K J
	R449	VE-30000489	SMD RES.	1/10W 1R J
	R450	VE-30000631	SMD RES.	1/10W 2.7K J
	R451	VE-30000633	CF RES.	1/4W 27K J
	R452	VE-30000309	SMD CAP.	2.2NF 50V K R
	R453	VE-30000606	SMD RES.	1/10W 2.2M J
	R454	VE-30000534	SMD RES.	1/10W 15K J
	R455	VE-30000650	CF RES.	1/4W 33R J
	R456	VE-30000550	SMD RES.	1/10W 160K J
	R457	VE-30000606	SMD RES.	1/10W 2.2M J
	R458	VE-30000732	SMD RES.	1/10W 470K J
	R459	VE-30000697	SMD RES.	1/10W 39K G
	R460	VE-30000770	CF RES.	1/4W 680R J
	R465	VE-30006658	SMD RES.	1/10W 82R J
	R474	VE-30000597	SMD RES.	1/10W 22K J
	R475	VE-30000475	SMD RES.	1/10W 10K J
	R486	VE-30000721	SMD RES.	1/10W 4.7K J
	R488	VE-30000471	CF RES.	1/4W 10K J
	R492	VE-30000588	SMD RES.	1/10W 220R J
	R493	VE-30000588	SMD RES.	1/10W 220R J
	R494	VE-30000526	CF RES.	1/4W 1.5K J
	R498	VE-30000563	SMD RES.	1/10W 1.8K J
	R500	VE-30000469	SMD RES.	1/10W 1K J
	R502	VE-30000469	SMD RES.	1/10W 1K J
	R503	VE-30000469	SMD RES.	1/10W 1K J
	R507	VE-30000469	SMD RES.	1/10W 1K J
	R512	VE-30000727	SMD RES.	1/10W 47K J
	R513	VE-30000727	SMD RES.	1/10W 47K J
	R514	VE-30000727	SMD RES.	1/10W 47K J
	R515	VE-30000727	SMD RES.	1/10W 47K J
	R516	VE-30000464	SMD RES.	1/10W 100R J
	R517	VE-30000464	SMD RES.	1/10W 100R J
	R523	VE-30000475	SMD RES.	1/10W 10K J
	R524	VE-30000475	SMD RES.	1/10W 10K J
	R527	VE-30000721	SMD RES.	1/10W 4.7K J
	R528	VE-30000560	CF RES.	1/4W 1.8K J
	R529	VE-30000560	CF RES.	1/4W 1.8K J
	R530	VE-30000560	CF RES.	1/4W 1.8K J
	R532	VE-30000475	SMD RES.	1/10W 10K J
	R533	VE-30000721	SMD RES.	1/10W 4.7K J
	R535	VE-30000721	SMD RES.	1/10W 4.7K J
	R537	VE-30000593	SMD RES.	1/10W 2.2K J
	R538	VE-30000475	SMD RES.	1/10W 10K J
	R539	VE-30000475	SMD RES.	1/10W 10K J

[AV28BT7ENS / AV28BT7ENB]

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R540	VE-30000818	SMD RES.	1/10W 8.2K J
	R541	VE-30000721	SMD RES.	1/10W 4.7K J
	R542	VE-30000721	SMD RES.	1/10W 4.7K J
	R543	VE-30000717	SMD RES.	1/10W 470R J
	R548	VE-30000721	SMD RES.	1/10W 4.7K J
	R549	VE-30000531	CF RES.	1/4W 15K J
	R550	VE-30000721	SMD RES.	1/10W 4.7K J
	R551	VE-30000475	SMD RES.	1/10W 10K J
	R552	VE-30000593	SMD RES.	1/10W 2.2K J
	R554	VE-30000815	CF RES.	1/4W 8.2K J
	R556	VE-30000567	SMD RES.	1/10W 18K J
	R559	VE-30000588	SMD RES.	1/10W 220R J
	R560	VE-30000469	SMD RES.	1/10W 1K J
	R561	VE-30000692	SMD RES.	1/10W 3.9K J
	R562	VE-30000471	CF RES.	1/4W 10K J
	R563	VE-30000471	CF RES.	1/4W 10K J
	R564	VE-30000475	SMD RES.	1/10W 10K J
	R565	VE-30000475	SMD RES.	1/10W 10K J
	R566	VE-30010167	SMD RES.	1/10W 56R J
	R568	VE-30000475	SMD RES.	1/10W 10K J
	R569	VE-30000459	CF RES.	1/4W 100R J
	R570	VE-30000531	CF RES.	1/4W 15K J
	R571	VE-30000466	CF RES.	1/4W 1K J
	R572	VE-30000475	SMD RES.	1/10W 10K J
	R573	VE-30000721	SMD RES.	1/10W 4.7K J
	R574	VE-30000692	SMD RES.	1/10W 3.9K J
	R578	VE-30000475	SMD RES.	1/10W 10K J
	R579	VE-30000721	SMD RES.	1/10W 4.7K J
	R580	VE-30000464	SMD RES.	1/10W 100R J
	R581	VE-30000588	SMD RES.	1/10W 220R J
	R582	VE-30000464	SMD RES.	1/10W 100R J
	R583	VE-30000475	SMD RES.	1/10W 10K J
	R584	VE-30000563	SMD RES.	1/10W 1.8K J
	R586	VE-30000480	SMD RES.	1/10W 100K J
	R587	VE-30000712	CF RES.	1/4W 470R J
	R590	VE-30000721	SMD RES.	1/10W 4.7K J
	R594	VE-30000475	SMD RES.	1/10W 10K J
	R595	VE-30000475	SMD RES.	1/10W 10K J
	R596	VE-30000475	SMD RES.	1/10W 10K J
	R601	VE-30000718	CF RES.	1/4W 4.7K J
	R602	VE-30000464	SMD RES.	1/10W 100R J
	R605	VE-30000466	CF RES.	1/4W 1K J
	R606	VE-30000704	CF RES.	1/4W 43K J
	R608	VE-30001235	FUSE RES.	1/2W 0.33R J
	R610	VE-30001171	MO RES.	2W 4.7K J
⚠	R611	VE-30001215	FUSE RES.	1W 1R J
	R613	VE-30000815	CF RES.	1/4W 8.2K J
	R614	VE-30000775	CF RES.	1/4W 6.8K J
	R615	VE-30000815	CF RES.	1/4W 8.2K J
	R617	VE-30000775	CF RES.	1/4W 6.8K J
	R618	VE-30000464	SMD RES.	1/10W 100R J
	R619	VE-30000815	CF RES.	1/4W 8.2K J
	R620	VE-30001082	MO RES.	1/2W 1K J
	R621	VE-30000459	CF RES.	1/4W 100R J
	R626	VE-30000466	CF RES.	1/4W 1K J
⚠	R628	VE-30001228	FUSE RES.	1/2W 2.2R J
⚠	R629	VE-30001232	FUSE RES.	1/4W 2.7R J
	R630	VE-30001082	MO RES.	1/2W 1K J
	R631	VE-30001171	MO RES.	2W 4.7K J
	R639	VE-30000542	SMD RES.	1/10W 1.5M J
	R700	VE-30000466	CF RES.	1/4W 1K J
	R703	VE-30000860	MF RES.	1/4W 1R F
⚠	R704	VE-30001251	FUSE RES.	1/2W 56R J
	R705	VE-30000580	CF RES.	1/4W 22R J
	R706	VE-30000949	MF RES.	1/4W 3K G
	R707	VE-30000712	CF RES.	1/4W 470R J
	R708	VE-30000469	SMD RES.	1/10W 1K J
	R709	VE-30000475	SMD RES.	1/10W 10K J
	R710	VE-30000718	CF RES.	1/4W 4.7K J
	R711	VE-30000500	CF RES.	1/4W 12K J
	R714	VE-30000459	CF RES.	1/4W 100R J
	R715	VE-30000459	CF RES.	1/4W 100R J
	R716	VE-30000466	CF RES.	1/4W 1K J
	R717	VE-30000712	CF RES.	1/4W 470R J
	R805	VE-30000633	CF RES.	1/4W 27K J
	R806	VE-30001129	MO RES.	3W 22K J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R807	VE-30000466	CF RES.	1/4W 1K J
	R808	VE-30000818	SMD RES.	1/10W 8.2K J
	R809	VE-30000469	SMD RES.	1/10W 1K J
	R810	VE-30000597	SMD RES.	1/10W 22K J
	R811	VE-30000597	SMD RES.	1/10W 22K J
	R812	VE-30000519	CF RES.	1/4W 150R J
	R813	VE-30000475	SMD RES.	1/10W 10K J
	R814	VE-30000706	CF RES.	1/4W 47R J
	R816	VE-30000540	CF RES.	1/2W 1.5M J (400V)
	R818	VE-30000466	CF RES.	1/4W 1K J
	R821	VE-30000602	SMD RES.	1/10W 220K J
	R822	VE-30001156	MO RES.	5W 33K J
	R823	VE-30000513	CF RES.	1/4W 130K J
	R824	VE-30000572	CF RES.	1/4W 2K J
	R828	VE-30007759	CF RES.	1W 47K J
	R829	VE-30000469	SMD RES.	1/10W 1K J
	R831	VE-30000471	CF RES.	1/4W 10K J
	R832	VE-30000721	SMD RES.	1/10W 4.7K J
	R833	VE-30000710	SMD RES.	1/10W 47R J
	R834	VE-30000818	SMD RES.	1/10W 8.2K J
	R835	VE-30000580	CF RES.	1/4W 22R J
	R836	VE-30000706	CF RES.	1/4W 47R J
	R844	VE-30000471	CF RES.	1/4W 10K J
⚠	R845	VE-30001257	MG RES.	1/2W 4.7M J
	R849	VE-30000534	SMD RES.	1/10W 15K J
	R850	VE-30000569	CF RES.	1/4W 180K J
	R858	VE-30000712	CF RES.	1/4W 470R J
	R868	VE-30000810	CF RES.	1/4W 820R J
	R869	VE-30000810	CF RES.	1/4W 820R J
	R870	VE-30001131	MO RES.	1W 0.22R J
	R871	VE-30000471	CF RES.	1/4W 10K J
	R872	VE-30007786	SMD RES.	1/10W 2.55K F
	R873	VE-30012852	SMD RES.	1/10W 3.9K F
	R879	VE-30000718	CF RES.	1/4W 4.7K J
	R885	VE-30000475	SMD RES.	1/10W 10K J
	R886	VE-30000475	SMD RES.	1/10W 10K J
	R888	VE-30000503	SMD RES.	1/10W 12K J
	R890	VE-30001089	MO RES.	2W 1R J
	R891	VE-30000466	CF RES.	1/4W 1K J
	R892	VE-30000531	CF RES.	1/4W 15K J
	R893	VE-30000477	CF RES.	1/4W 100K J
	R894	VE-30000660	CF RES.	1/4W 3.3K J
	R895	VE-30000638	CF RES.	1/4W 270K J
	CAPACITOR			
	C001	VE-30000375	EL CAP.	220UF 16V M
	C01	VE-30000332	SMD CAP.	4.7NF 50V K
	C010	VE-30000294	SMD CAP.	100NF 50V K
	C011	VE-30000294	SMD CAP.	100NF 50V K
	C012	VE-30000294	SMD CAP.	100NF 50V K
	C013	VE-30000375	EL CAP.	220UF 16V M
	C02	VE-30000332	SMD CAP.	4.7NF 50V K
	C028	VE-30000352	EL CAP.	100UF 16V M
	C029	VE-30000294	SMD CAP.	100NF 50V K
	C03	VE-30000332	SMD CAP.	4.7NF 50V K
	C030	VE-30000294	SMD CAP.	100NF 50V K
	C031	VE-30000294	SMD CAP.	100NF 50V K
	C032	VE-30000294	SMD CAP.	100NF 50V K
	C04	VE-30000332	SMD CAP.	4.7NF 50V K
	C051	VE-30000315	SMD CAP.	220NF 25V Z
	C052	VE-30000294	SMD CAP.	100NF 50V K
	C053	VE-30000315	SMD CAP.	220NF 25V Z
	C054	VE-30000315	SMD CAP.	220NF 25V Z
	C059	VE-30000300	SMD CAP.	1.5NF 50V K
	C060	VE-30000300	SMD CAP.	1.5NF 50V K
	C061	VE-30000242	SMD CAP.	330PF 50V J
	C062	VE-30000242	SMD CAP.	330PF 50V J
	C064	VE-30000300	SMD CAP.	1.5NF 50V K
	C065	VE-30000300	SMD CAP.	1.5NF 50V K
	C066	VE-30000242	SMD CAP.	330PF 50V J
	C067	VE-30000242	SMD CAP.	330PF 50V J
	C068	VE-30000345	EL CAP.	10UF 50V M
	C071	VE-30000315	SMD CAP.	220NF 25V Z
	C072	VE-30000294	SMD CAP.	100NF 50V K
	C073	VE-30000294	SMD CAP.	100NF 50V K

[AV28BT7ENS / AV28BT7ENB]

⚠ Symbol No.	Part No.	Part Name	Description
CAPACITOR			
C095	VE-30000289	SMD CAP.	10NF 50V K R
C097	VE-30000189	SMD CAP.	100PF 50V J
C098	VE-30000224	SMD CAP.	220PF 50V J
C099	VE-30000189	SMD CAP.	100PF 50V J
C101	VE-30000336	SMD CAP.	5.6NF 50V K
C102	VE-30000345	EL CAP.	10UF 50V M
C107	VE-30000336	SMD CAP.	5.6NF 50V K
C108	VE-30000312	SMD CAP.	22NF 50V K
C109	VE-30000332	SMD CAP.	4.7NF 50V K
C110	VE-30000312	SMD CAP.	22NF 50V K
C111	VE-30000332	SMD CAP.	4.7NF 50V K
C112	VE-30000109	MKT CAP.	470NF 63V J
C113	VE-30000109	MKT CAP.	470NF 63V J
C116	VE-30000082	MKT CAP.	15NF 63V J
C117	VE-30000082	MKT CAP.	15NF 63V J
C201	VE-30000352	EL CAP.	100UF 16V M
C203	VE-30000345	EL CAP.	10UF 50V M
C204	VE-30000345	EL CAP.	10UF 50V M
C211	VE-30000294	SMD CAP.	100NF 50V K
C212	VE-30000190	CER CAP.	100PF 50V J CH
C279	VE-30000263	SMD CAP.	56PF 50V J CH
C301	VE-30000216	SMD CAP.	1.8PF 50V J CH
C302	VE-30000216	SMD CAP.	1.8PF 50V J CH
C304	VE-30000289	SMD CAP.	10NF 50V K R
C306	VE-30000345	EL CAP.	10UF 50V M
C307	VE-30000294	SMD CAP.	100NF 50V K
C308	VE-30000074	MKT CAP.	100NF 63V J
C309	VE-30000345	EL CAP.	10UF 50V M
C316	VE-30000284	SMD CAP.	1NF 50V K R
C317	VE-30000284	SMD CAP.	1NF 50V K R
C318	VE-30000074	MKT CAP.	100NF 63V J
C319	VE-30000393	EL CAP.	3.3UF 50V M
C320	VE-30000294	SMD CAP.	100NF 50V K
C321	VE-30000345	EL CAP.	10UF 50V M
C322	VE-30000345	EL CAP.	10UF 50V M
C323	VE-30000345	EL CAP.	10UF 50V M
C326	VE-30000371	EL CAP.	22UF 50V M
C327	VE-30000371	EL CAP.	22UF 50V M
C328	VE-30000284	SMD CAP.	1NF 50V K R
C329	VE-30000284	SMD CAP.	1NF 50V K R
C330	VE-30000284	SMD CAP.	1NF 50V K R
C331	VE-30000284	SMD CAP.	1NF 50V K R
C332	VE-30000417	EL CAP.	6.8UF 50V M
C333	VE-30000294	SMD CAP.	100NF 50V K
C334	VE-30000345	EL CAP.	10UF 50V M
C335	VE-30000252	SMD CAP.	47PF 50V J
C336	VE-30000252	SMD CAP.	47PF 50V J
C338	VE-30000371	EL CAP.	22UF 50V M
C339	VE-30000256	SMD CAP.	470PF 50V J
C340	VE-30000100	MKT CAP.	330NF 63V J
C341	VE-30000256	SMD CAP.	470PF 50V J
C342	VE-30000100	MKT CAP.	330NF 63V J
C343	VE-30000224	SMD CAP.	220PF 50V J
C344	VE-30000100	MKT CAP.	330NF 63V J
C346	VE-30000224	SMD CAP.	220PF 50V J
C347	VE-30000371	EL CAP.	22UF 50V M
C348	VE-30000224	SMD CAP.	220PF 50V J
C349	VE-30000100	MKT CAP.	330NF 63V J
C350	VE-30000224	SMD CAP.	220PF 50V J
C351	VE-30000100	MKT CAP.	330NF 63V J
C352	VE-30000224	SMD CAP.	220PF 50V J
C353	VE-30000100	MKT CAP.	330NF 63V J
C355	VE-30000284	SMD CAP.	1NF 50V K R
C357	VE-30000294	SMD CAP.	100NF 50V K
C358	VE-30000345	EL CAP.	10UF 50V M
C364	VE-30000284	SMD CAP.	1NF 50V K R
C365	VE-30000384	EL CAP.	2.2UF 50V M
C366	VE-30000294	SMD CAP.	100NF 50V K
C368	VE-30000294	SMD CAP.	100NF 50V K
C369	VE-30000294	SMD CAP.	100NF 50V K
C370	VE-30000384	EL CAP.	2.2UF 50V M
C371	VE-30000109	MKT CAP.	470NF 63V J
C373	VE-30000371	EL CAP.	22UF 50V M
C374	VE-30000294	SMD CAP.	100NF 50V K
C379	VE-30000294	SMD CAP.	100NF 50V K
C385	VE-30000294	SMD CAP.	100NF 50V K

⚠ Symbol No.	Part No.	Part Name	Description
CAPACITOR			
C400	VE-30000294	SMD CAP.	100NF 50V K
C401	VE-30000371	EL CAP.	22UF 50V M
C402	VE-30000345	EL CAP.	10UF 50V M
C403	VE-30000074	MKT CAP.	100NF 63V J
C403	VE-30000294	SMD CAP.	100NF 50V K
C404	VE-30000284	SMD CAP.	1NF 50V K R
C405	VE-30000345	EL CAP.	10UF 50V M
C405	VE-30000294	SMD CAP.	100NF 50V K
C406	VE-30000313	CER CAP.	22NF 50V Z F
C406	VE-30000284	SMD CAP.	1NF 50V K R
C407	VE-30000384	EL CAP.	2.2UF 50V M
C407	VE-30000284	SMD CAP.	1NF 50V K R
C408	VE-30000283	CER CAP.	1NF 50V K B
C409	VE-30000334	SMD CAP.	47NF 50V K
C410	VE-30000345	EL CAP.	10UF 50V M
C411	VE-30000334	SMD CAP.	47NF 50V K
C412	VE-30000312	SMD CAP.	22NF 50V K
C413	VE-30000375	EL CAP.	220UF 16V M
C416	VE-30000312	SMD CAP.	22NF 50V K
C417	VE-30000312	SMD CAP.	22NF 50V K
C418	VE-30000312	SMD CAP.	22NF 50V K
C419	VE-30000315	SMD CAP.	220NF 25V Z
C421	VE-30000220	SMD CAP.	22PF 50V J
C422	VE-30000220	SMD CAP.	22PF 50V J
C423	VE-30000322	SMD CAP.	3.3NF 50V K
C424	VE-30000294	SMD CAP.	100NF 50V K
C425	VE-30000312	SMD CAP.	22NF 50V K
C426	VE-30000353	EL CAP.	100UF 25V M
C427	VE-30000294	SMD CAP.	100NF 50V K
C428	VE-30000345	EL CAP.	10UF 50V M
C430	VE-30000289	SMD CAP.	10NF 50V K R
C431	VE-30000362	EL CAP.	1UF 50V M
C433	VE-30000284	SMD CAP.	1NF 50V K R
C434	VE-30000284	SMD CAP.	1NF 50V K R
C435	VE-30000074	MKT CAP.	100NF 63V J
C436	VE-30000074	MKT CAP.	100NF 63V J
C437	VE-30000362	EL CAP.	1UF 50V M
C438	VE-30000312	SMD CAP.	22NF 50V K
C439	VE-30000284	SMD CAP.	1NF 50V K R
C440	VE-30000345	EL CAP.	10UF 50V M
C446	VE-30000252	SMD CAP.	47PF 50V J
C447	VE-30000252	SMD CAP.	47PF 50V J
C448	VE-30000189	SMD CAP.	100PF 50V J
C450	VE-30000294	SMD CAP.	100NF 50V K
C459	VE-30000332	SMD CAP.	4.7NF 50V K
C465	VE-30000300	SMD CAP.	1.5NF 50V K
C490	VE-30000284	SMD CAP.	1NF 50V K R
C497	VE-30000300	SMD CAP.	1.5NF 50V K
C498	VE-30000189	SMD CAP.	100PF 50V J
C499	VE-30000300	SMD CAP.	1.5NF 50V K
C505	VE-30000294	SMD CAP.	100NF 50V K
C513	VE-30000294	SMD CAP.	100NF 50V K
C514	VE-30000345	EL CAP.	10UF 50V M
C516	VE-30000371	EL CAP.	22UF 50V M
C517	VE-30000352	EL CAP.	100UF 16V M
C521	VE-30000109	MKT CAP.	470NF 63V J
C524	VE-30000237	SMD CAP.	33PF 50V J
C525	VE-30000237	SMD CAP.	33PF 50V J
C526	VE-30000294	SMD CAP.	100NF 50V K
C530	VE-30000294	SMD CAP.	100NF 50V K
C531	VE-30000294	SMD CAP.	100NF 50V K
C532	VE-30000294	SMD CAP.	100NF 50V K
C533	VE-30000294	SMD CAP.	100NF 50V K
C537	VE-30000294	SMD CAP.	100NF 50V K
C538	VE-30000294	SMD CAP.	100NF 50V K
C570	VE-30000371	EL CAP.	22UF 50V M
C571	VE-30000371	EL CAP.	22UF 50V M
C572	VE-30000371	EL CAP.	22UF 50V M
C573	VE-30000371	EL CAP.	22UF 50V M
C576	VE-30000201	SMD CAP.	15PF 50V J
C577	VE-30000201	SMD CAP.	15PF 50V J
C580	VE-30000387	EL CAP.	33UF 50V M
C583	VE-30000294	SMD CAP.	100NF 50V K
C590	VE-30000294	SMD CAP.	100NF 50V K
C596	VE-30000289	SMD CAP.	10NF 50V K R
C597	VE-30000289	SMD CAP.	10NF 50V K R

[AV28BT7ENS / AV28BT7ENB]

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C598	VE-30000289	SMD CAP.	10NF 50V K R
	C599	VE-30000334	SMD CAP.	47NF 50V K
	C600	VE-30000289	SMD CAP.	10NF 50V K R
	C601	VE-30000355	EL CAP.	100UF 50V M
	C603	VE-30000309	SMD CAP.	2.2NF 50V K R
	C604	VE-30000107	MKT CAP.	47NF 250V J
	C605	VE-30000075	MKT CAP.	100NF 250V K (DC)
	C606	VE-30000406	EL CAP.	47UF 250V M (HR)
	C607	VE-30000407	EL CAP.	470UF 16V M
	C608	VE-30009206	SMD CAP.	15NF 50V K R
	C610	VE-30000123	PP CAP.	33NF 630V K
	C611	VE-30000143	MKP CAP.	2.2NF 2KV %3.5
	C612	VE-30000356	EL CAP.	100UF 63V M
	C613	VE-30000121	KP CAP.	27NF 630V J
	C617	VE-30000172	MKP CAP.	680NF 250V J (P=15)
	C618	VE-30000078	MKT CAP.	1UF 100V M
	C620	VE-30000433	CER CAP.	1NF 1KV M B
	C621	VE-30000078	MKT CAP.	1UF 100V M
	C625	VE-30000315	SMD CAP.	220NF 25V Z
	C626	VE-30000180	MKP CAP.	9.1NF 2000V %3.5
	C627	VE-30000340	SMD CAP.	6.8NF 50V K
	C630	VE-30000156	MKP CAP.	430NF 250V J
	C632	VE-30016086	EL CAP.	1000UF 25V 105°
	C650	VE-30000280	SMD CAP.	820PF 50V J
	C660	VE-30009208	CER CAP.	470PF 1KV K (PULSE)
	C661	VE-30009208	CER CAP.	470PF 1KV K (PULSE)
	C700	VE-30000190	CER CAP.	100PF 50V J CH
	C702	VE-30000356	EL CAP.	100UF 63V M
	C704	VE-30016085	EL CAP.	10UF 63V 105°
	C705	VE-30000071	MKT CAP.	10NF 63V J
	C706	VE-30000092	MKT CAP.	220NF 63V J
	C707	VE-30000069	MKT CAP.	1NF 100V J
	C708	VE-30000189	SMD CAP.	100PF 50V J
	C709	VE-30000294	SMD CAP.	100NF 50V K
	C715	VE-30000189	SMD CAP.	100PF 50V J
⚠	C801	VE-30000084	MKT CAP.	150NF 275V M AC P=15
⚠	C802	VE-30000084	MKT CAP.	150NF 275V M AC P=15
	C803	VE-30000189	SMD CAP.	100PF 50V J
	C804	VE-30000421	EL CAP.	220UF 400V M (FOR 28'')
	C806	VE-30000342	CER CAP.	820PF 50V K B
	C807	VE-30000074	MKT CAP.	100NF 63V J
	C808	VE-30000284	SMD CAP.	1NF 50V K R
	C809	VE-30000309	SMD CAP.	2.2NF 50V K R
	C810	VE-30000076	MKT CAP.	100NF 275V M AC
	C811	VE-30000161	MKP CAP.	47NF 630V J
	C813	VE-30000411	EL CAP.	4700UF 16V M
	C814	VE-30000294	SMD CAP.	100NF 50V K
	C816	VE-30000295	CER CAP.	100NF 50V Z F
	C817	VE-30000359	EL CAP.	1000UF 16V M
	C819	VE-30000295	CER CAP.	100NF 50V Z F
	C821	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C822	VE-30000295	CER CAP.	100NF 50V Z F
	C823	VE-30000383	EL CAP.	2200UF 25V M
	C824	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C825	VE-30000295	CER CAP.	100NF 50V Z F
	C826	VE-30000383	EL CAP.	2200UF 25V M
	C827	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C828	VE-30000359	EL CAP.	1000UF 16V M
	C829	VE-30000406	EL CAP.	47UF 250V M (HR)
	C830	VE-30000295	CER CAP.	100NF 50V Z F
	C831	VE-30000198	CER CAP.	120PF 500V J SL
	C832	VE-30000294	SMD CAP.	100NF 50V K
	C835	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C845	VE-30000375	EL CAP.	220UF 16V M
	C846	VE-30000433	CER CAP.	1NF 1KV M B
	C847	VE-30000375	EL CAP.	220UF 16V M
	C848	VE-30000353	EL CAP.	100UF 25V M
	C850	VE-30000433	CER CAP.	1NF 1KV M B
	C851	VE-30000433	CER CAP.	1NF 1KV M B
	C852	VE-30000433	CER CAP.	1NF 1KV M B
	C853	VE-30000289	SMD CAP.	10NF 50V K R
	C854	VE-30008805	MKT CAP.	39NF 63V J
	C855	VE-30000284	SMD CAP.	1NF 50V K R
	C860	VE-30000440	CER CAP.	2.2NF 4KV M
	C865	VE-30000440	CER CAP.	2.2NF 4KV M
	C890	VE-30000396	EL CAP.	47UF 16V M

⚠	Symbol No.	Part No.	Part Name	Description
	C891	VE-30000335	CER CAP.	47NF 50V Z F
	C892	VE-30000295	CER CAP.	100NF 50V Z F

COIL

Symbol No.	Part No.	Part Name	Description
L001	VE-30002016	FIXED COIL	150UH Q60 K
L002	VE-30010964	FERRITE BEAT	
L050	VE-30002015	FIXED COIL	150UH Q50 K (RAD)
L051	VE-30002015	FIXED COIL	150UH Q50 K (RAD)
L054	VE-30010964	FERRITE BEAT	
L201	VE-30001979	FIXED COIL	1UH Q45 M-A
L202	VE-30010964	FERRITE BEAT	
L301	VE-30001987	FIXED COIL	4.7UH Q70 K-A
L302	VE-30001987	FIXED COIL	4.7UH Q70 K-A
L303	VE-30001987	FIXED COIL	4.7UH Q70 K-A
L304	VE-30001986	FIXED COIL	3.3UH Q65 K
L306	VE-30002002	FIXED COIL	47UH Q60 K
L307	VE-30002002	FIXED COIL	47UH Q60 K
L308	VE-30002002	FIXED COIL	47UH Q60 K
L309	VE-30002002	FIXED COIL	47UH Q60 K
L402	VE-30001986	FIXED COIL	3.3UH Q65 K
L403	VE-30001990	FIXED COIL	6.8UH Q75 K
L405	VE-30001992	FIXED COIL	10UH Q65 K-A
L406	VE-30001992	FIXED COIL	10UH Q65 K-A
L407	VE-30001992	FIXED COIL	10UH Q65 K-A
L502	VE-30001992	FIXED COIL	10UH Q65 K-A
L504	VE-30001992	FIXED COIL	10UH Q65 K-A
L505	VE-30001992	FIXED COIL	10UH Q65 K-A
L506	VE-30001992	FIXED COIL	10UH Q65 K-A
L515	VE-30001992	FIXED COIL	10UH Q65 K-A
L602	VE-30002026	FIXED COIL	1MH AK19 25/28
L603	VE-30002156	LINEARITY COIL	30UH 110' (AK19)
L604	VE-30002031	FIXED COIL	INJECTION 15MH
L605	VE-30001999	FIXED COIL	40UH (LOSS COIL)
L801	VE-30001984	FIXED COIL	2.2UH Q55 M-AX
L803	VE-30002011	CHOKE COIL	150UH 0.82A RAD

DIODE

Symbol No.	Part No.	Part Name
D001	VE-30001284	DIODE
D002	VE-30001284	DIODE
D003	VE-30001284	DIODE
D004	VE-30001284	DIODE
D100	VE-30001284	DIODE
D201	VE-30001284	DIODE
D301	VE-30001369	ZENER DIODE
D302	VE-30001284	DIODE
D408	VE-30001347	ZENER DIODE
D420	VE-30001285	DIODE
D500	VE-30012412	ZENER DIODE
D503	VE-30001284	DIODE
D504	VE-30001284	DIODE
D505	VE-30012412	ZENER DIODE
D509	VE-30001284	DIODE
D555	VE-30001285	DIODE
D583	VE-30001284	DIODE
D601	VE-30001318	DIODE
D602	VE-30001285	DIODE
D603	VE-30001284	DIODE
D604	VE-30001377	ZENER DIODE
D605	VE-30001318	DIODE
D606	VE-30001318	DIODE
D607	VE-30001285	DIODE
D608	VE-30001284	DIODE
D609	VE-30001318	DIODE
D611	VE-30001323	DIODE
D612	VE-30001320	DIODE
D698	VE-30001318	DIODE
D701	VE-30001284	DIODE
D801	VE-30001329	DIODE
D802	VE-30001329	DIODE
D803	VE-30001329	DIODE
D804	VE-30001329	DIODE
D805	VE-30001318	DIODE
D807	VE-30001318	DIODE
D811	VE-30001315	DIODE

[AV28BT7ENS / AV28BT7ENB]

DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D812	VE-30001315	DIODE	
	D813	VE-30001288	DIODE	
	D814	VE-30001307	DIODE	
	D815	VE-30001307	DIODE	
	D816	VE-30007681	DIODE	
	D818	VE-30001318	DIODE	
	D819	VE-30001349	ZENER DIODE	
	D823	VE-30001284	DIODE	
	D826	VE-30001318	DIODE	
	D827	VE-30001318	DIODE	
	D858	VE-30001371	ZENER DIODE	
	D864	VE-30001285	DIODE	
	D890	VE-30001284	DIODE	

TRANSISTOR

Q001	VE-30001455	TR	
Q055	VE-30001454	TR	
Q100	VE-30001454	TR	
Q301	VE-30001455	TR	
Q402	VE-30001454	TR	
Q406	VE-30001454	TR	
Q407	VE-30001454	TR	
Q415	VE-30001454	TR	
Q420	VE-30001454	TR	
Q503	VE-30001455	TR	
Q512	VE-30001455	TR	
Q514	VE-30001454	TR	
Q515	VE-30001454	TR	
Q516	VE-30001454	TR	
Q517	VE-30001454	TR	
Q518	VE-30001454	TR	
Q601	VE-30001455	TR	
Q603	VE-20000963	HE.ASY.	
Q604	VE-30001435	TR	
Q605	VE-30001441	TR	
Q701	VE-30001455	TR	
Q702	VE-30001454	TR	
Q802	VE-20073672	HE.ASY.	
Q805	VE-30001454	TR	
Q806	VE-30001454	TR	
Q807	VE-30001454	TR	
Q809	VE-30001506	IC	
Q810	VE-30001384	TR	
Q890	VE-30001428	TR	

IC

⚠				
	IC050	VE-30001619	IC	
	IC301	VE-30001664	IC	
	IC307	VE-30001495	IC	
	IC401	VE-30001577	IC	
	IC501	VE-20075294	PR.IC	(MYCOM)
	IC502	VE-20073442	IC	(MEMORY)
	IC701	VE-30002736	IC	
⚠	IC801	VE-30007069	IC	
	IC802	VE-30001499	IC	
	IC804	VE-20058533	HE.ASY.	
	IC805	VE-30001500	IC	
	IC807	VE-30001622	IC	

OTHER

⚠				
⚠	F801	VE-20000848	FUSE ASSY	(2.5A)
	J129	VE-30001997	FIXED COIL	33UH Q60 J
	J314	VE-20058569	MD.ASY.	
	J500	VE-30010964	FERRITE BEAT	
	J616	VE-30006712	FERRITE BEAD	3.5X4.7X0.8
	PL892	VE-30007118	PIN F	2P/7.5MM
	PL893	VE-30007118	PIN F	2P/7.5MM
	TH801	VE-30001268	THERMISTOR	
	TR601	VE-30002090	LINE DRIVER	

⚠	Symbol No.	Part No.	Part Name	Description
⚠	TR602	VE-30002054	TRF FBT	
⚠	TR801	VE-30002103	LINE FILTER	
⚠	TR802	VE-30002080	TRF SMPS	
	TU201	VE-30009637	TUNER WSP (PLL)	
	VL301	VE-30002037	ADJ COIL	
	VR801	VE-30001064	ADJ RES.	470R 0.1W VER (MAN)
	X301	VE-30001756	XTAL	
	X401	VE-30001748	XTAL	
	X404	VE-30001745	XTAL	
	X501	VE-30006662	XTAL	
	Z209	VE-30001724	FILTER SER TRAP	
	Z301	VE-30001706	SAW FILTER	
	Z302	VE-30001692	SAW FILTER	
	Z401	VE-30001692	SAW FILTER	

[AV28BT7ENS / AV28BT7ENB]

MULTI SOUND P.W. BOARD ASS'Y (VE-20078991)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R001	VE-30000631	SMD RES.	1/10W 2.7K J
	R002	VE-30000631	SMD RES.	1/10W 2.7K J
	R303	VE-30000469	SMD RES.	1/10W 1K J
	R304	VE-30000717	SMD RES.	1/10W 470R J
	R305	VE-30000717	SMD RES.	1/10W 470R J
	R306	VE-30000464	SMD RES.	1/10W 100R J
	R307	VE-30000464	SMD RES.	1/10W 100R J
	R308	VE-30000464	SMD RES.	1/10W 100R J
	R309	VE-30000660	CF RES.	1/4W 3.3K J
	R310	VE-30000660	CF RES.	1/4W 3.3K J
	R311	VE-30000531	CF RES.	1/4W 15K J
	R313	VE-30000534	SMD RES.	1/10W 15K J
	R314	VE-30000534	SMD RES.	1/10W 15K J
	R315	VE-30000534	SMD RES.	1/10W 15K J
	R341	VE-30000524	SMD RES.	1/10W 150R J
⚠	R343	VE-30001248	FUSE RES.	1/4W 4.7R J
	R359	VE-30000464	SMD RES.	1/10W 100R J
	R360	VE-30000464	SMD RES.	1/10W 100R J
	R361	VE-30000464	SMD RES.	1/10W 100R J
	R364	VE-30000464	SMD RES.	1/10W 100R J
	R378	VE-30000471	CF RES.	1/4W 10K J
	R379	VE-30000475	SMD RES.	1/10W 10K J
	R399	VE-30000717	SMD RES.	1/10W 470R J
	CAPACITOR			
	C279	VE-30000263	SMD CAP.	56PF 50V J CH
	C301	VE-30000216	SMD CAP.	1.8PF 50V J CH
	C302	VE-30000216	SMD CAP.	1.8PF 50V J CH
	C304	VE-30000289	SMD CAP.	10NF 50V K R
	C306	VE-30000345	EL CAP.	10UF 50V M
	C307	VE-30000294	SMD CAP.	100NF 50V K
	C308	VE-30000074	MKT CAP.	100NF 63V J
	C309	VE-30000345	EL CAP.	10UF 50V M
	C316	VE-30000284	SMD CAP.	1NF 50V K R
	C317	VE-30000284	SMD CAP.	1NF 50V K R
	C318	VE-30000074	MKT CAP.	100NF 63V J
	C319	VE-30000393	EL CAP.	3.3UF 50V M
	C320	VE-30000294	SMD CAP.	100NF 50V K
	C321	VE-30000345	EL CAP.	10UF 50V M
	C322	VE-30000345	EL CAP.	10UF 50V M
	C323	VE-30000345	EL CAP.	10UF 50V M
	C326	VE-30000371	EL CAP.	22UF 50V M
	C327	VE-30000371	EL CAP.	22UF 50V M
	C328	VE-30000284	SMD CAP.	1NF 50V K R
	C329	VE-30000284	SMD CAP.	1NF 50V K R
	C330	VE-30000284	SMD CAP.	1NF 50V K R
	C331	VE-30000284	SMD CAP.	1NF 50V K R
	C332	VE-30000417	EL CAP.	6.8UF 50V M
	C333	VE-30000294	SMD CAP.	100NF 50V K
	C334	VE-30000345	EL CAP.	10UF 50V M
	C335	VE-30000252	SMD CAP.	47PF 50V J
	C336	VE-30000252	SMD CAP.	47PF 50V J
	C338	VE-30000371	EL CAP.	22UF 50V M
	C339	VE-30000256	SMD CAP.	470PF 50V J
	C340	VE-30000100	MKT CAP.	330NF 63V J
	C341	VE-30000256	SMD CAP.	470PF 50V J
	C342	VE-30000100	MKT CAP.	330NF 63V J
	C343	VE-30000224	SMD CAP.	220PF 50V J
	C344	VE-30000100	MKT CAP.	330NF 63V J
	C346	VE-30000224	SMD CAP.	220PF 50V J
	C347	VE-30000371	EL CAP.	22UF 50V M
	C348	VE-30000224	SMD CAP.	220PF 50V J
	C349	VE-30000100	MKT CAP.	330NF 63V J
	C350	VE-30000224	SMD CAP.	220PF 50V J
	C351	VE-30000100	MKT CAP.	330NF 63V J
	C352	VE-30000224	SMD CAP.	220PF 50V J
	C353	VE-30000100	MKT CAP.	330NF 63V J
	C355	VE-30000284	SMD CAP.	1NF 50V K R
	C357	VE-30000294	SMD CAP.	100NF 50V K
	C358	VE-30000345	EL CAP.	10UF 50V M
	C364	VE-30000284	SMD CAP.	1NF 50V K R
	C365	VE-30000384	EL CAP.	2.2UF 50V M
	C366	VE-30000294	SMD CAP.	100NF 50V K

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C368	VE-30000294	SMD CAP.	100NF 50V K
	C369	VE-30000294	SMD CAP.	100NF 50V K
	C370	VE-30000384	EL CAP.	2.2UF 50V M
	C371	VE-30000109	MKT CAP.	470NF 63V J
	C373	VE-30000371	EL CAP.	22UF 50V M
	C374	VE-30000294	SMD CAP.	100NF 50V K
	C379	VE-30000294	SMD CAP.	100NF 50V K
	C385	VE-30000294	SMD CAP.	100NF 50V K
	C400	VE-30000294	SMD CAP.	100NF 50V K
	C401	VE-30000371	EL CAP.	22UF 50V M
	C403	VE-30000294	SMD CAP.	100NF 50V K
	C404	VE-30000284	SMD CAP.	1NF 50V K R
	C405	VE-30000294	SMD CAP.	100NF 50V K
	C406	VE-30000284	SMD CAP.	1NF 50V K R
	C407	VE-30000284	SMD CAP.	1NF 50V K R
	COIL			
	L301	VE-30001987	FIXED COIL	4.7UH Q70 K-A
	L302	VE-30001987	FIXED COIL	4.7UH Q70 K-A
	L303	VE-30001987	FIXED COIL	4.7UH Q70 K-A
	L304	VE-30001986	FIXED COIL	3.3UH Q65 K
	L306	VE-30002002	FIXED COIL	47UH Q60 K
	L307	VE-30002002	FIXED COIL	47UH Q60 K
	L308	VE-30002002	FIXED COIL	47UH Q60 K
	L309	VE-30002002	FIXED COIL	47UH Q60 K
	DIODE			
	D301	VE-30001369	DIODE ZENER	
	D302	VE-30001284	DIODE	
	TRANSISTOR			
	Q301	VE-30001455	TR	
	IC			
	IC301	VE-30001664	IC	
	IC307	VE-30001495	IC	
	OTHERS			
	VL301	VE-30002037	ADJ COIL	VIF 38.9 Q80
	X301	VE-30001756	XTAL	
	Z301	VE-30001706	FILTER SAW	
	Z302	VE-30001692	FILTER SAW	

[AV28BT7ENS / AV28BT7ENB]

CRT SOCKET P.W. BOARD ASS'Y (VE-20074437)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R901	VE-30000525	CF RES.	1/2W 1.5K J
	R902	VE-30000525	CF RES.	1/2W 1.5K J
	R903	VE-30000525	CF RES.	1/2W 1.5K J
	R905	VE-30000525	CF RES.	1/2W 1.5K J
	R906	VE-30000525	CF RES.	1/2W 1.5K J
	R907	VE-30000459	CF RES.	1/4W 100R J
	R908	VE-30000459	CF RES.	1/4W 100R J
	R909	VE-30000459	CF RES.	1/4W 100R J
⚠	R914	VE-30001242	FUSE RES.	1/4W 47R J
	CAPACITOR			
	C901	VE-30000075	MKT CAP.	100NF 250V K (DC)
	C902	VE-30000350	EL CAP.	10UF 250V M
	C903	VE-30000434	CER CAP.	1NF 2KV K B
	C904	VE-30000319	CER CAP.	2.7NF 500V K B
	DIODE			
	D900	VE-30001347	DIODE ZENER	8.2V
	IC			
	IC901	VE-20000954	HE.ASY.19-CRT BOARD	
	OTHERS			
⚠	PL900	VE-30015752	SOCKET CRT	
	SP901	VE-30000428	SPARK GAP 300V	
	SP902	VE-30000428	SPARK GAP 300V	
	SP903	VE-30000428	SPARK GAP 300V	
	SP904	VE-30000428	SPARK GAP 300V	

FRONT CONTROL P.W. BOARD ASS'Y (VE-20001612)

⚠	Symbol No.	Part No.	Part Name	Description
	OTHERS			
	LD101	VE-30001279	LED RED/GREEN	
	MD101	VE-30001670	PREAMPLIFIER	
	SW101	VE-30002181	SWITCH TACT	
	SW102	VE-30002181	SWITCH TACT	
	SW103	VE-30002181	SWITCH TACT	
	SW104	VE-30002181	SWITCH TACT	
	SW105	VE-30002181	SWITCH TACT	

FRONT AV + HEADPHONE JACK P.W. BOARD ASS'Y (VE-20083646)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R107	VE-30000594	CF RES.	1/4W 22K J
	R108	VE-30000712	CF RES.	1/4W 470R J
	R109	VE-30000594	CF RES.	1/4W 22K J
	R110	VE-30000712	CF RES.	1/4W 470R J
	R113	VE-30000744	CF RES.	1/4W 560R J
	R114	VE-30000744	CF RES.	1/4W 560R J
	R115	VE-30000712	CF RES.	1/4W 470R J
	R116	VE-30000712	CF RES.	1/4W 470R J
	CAPACITOR			
	C103	VE-30000213	CER CAP.	180PF 50V J CH
	C104	VE-30000213	CER CAP.	180PF 50V J CH
	C106	VE-30000190	CER CAP.	100PF 50V J CH
	COIL			
	L103	VE-30000744	CF RES.	1/4W 560R J
	L104	VE-30001996	FIXED COIL	22UH Q40 K
	OTHER			
	CON102	VE-30001893	RCA JACK	
	CON103	VE-30001891	RCA JACK	
	CON104	VE-30001892	RCA JACK	
	CON106	VE-30001900	JACK HEADPHONE	
	T103	VE-30001962	FERRITE	
	T104	VE-30001963	FERRITE	
	T107	VE-30001963	FERRITE	

PROTECTION MODULE P.W. BOARD ASS'Y (VE-20058569)

⚠	Symbol No.	Part No.	Part Name	Description
	OTHERS			
		VE-20058569	PROTECTION MODULE	

T(SPOT KILLER) MODULE P.W. BOARD ASS'Y (VE-20019598)

⚠	Symbol No.	Part No.	Part Name	Description
	OTHERS			
		VE-20019598	T(SPOT KILLER) MODULE	

PRINTED WIRING BOARD PARTS LIST

[AV28BT7EES / AV28BT7EEB]

MAIN P.W. BOARD ASS'Y (VE-20073447)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R001	VE-30000471	CF RES.	1/4W 10K J
	R001	VE-30000631	SMD RES.	1/10W 2.7K J
	R002	VE-30000471	CF RES.	1/4W 10K J
	R002	VE-30000631	SMD RES.	1/10W 2.7K J
	R003	VE-30000770	CF RES.	1/4W 680R J
	R010	VE-30000797	SMD RES.	1/10W 75R J
	R011	VE-30000480	SMD RES.	1/10W 100K J
	R012	VE-30000480	SMD RES.	1/10W 100K J
	R014	VE-30000477	CF RES.	1/4W 100K J
	R015	VE-30000480	SMD RES.	1/10W 100K J
	R040	VE-30000797	SMD RES.	1/10W 75R J
	R041	VE-30000797	SMD RES.	1/10W 75R J
	R044	VE-30000459	CF RES.	1/4W 100R J
	R045	VE-30000524	SMD RES.	1/10W 150R J
	R049	VE-30000717	SMD RES.	1/10W 470R J
	R050	VE-30000464	SMD RES.	1/10W 100R J
	R051	VE-30000464	SMD RES.	1/10W 100R J
	R065	VE-30000797	SMD RES.	1/10W 75R J
	R066	VE-30000774	SMD RES.	1/10W 680R J
	R067	VE-30000469	SMD RES.	1/10W 1K J
	R068	VE-30000774	SMD RES.	1/10W 680R J
	R069	VE-30000469	SMD RES.	1/10W 1K J
	R070	VE-30000588	SMD RES.	1/10W 220R J
	R071	VE-30000588	SMD RES.	1/10W 220R J
	R072	VE-30000588	SMD RES.	1/10W 220R J
	R073	VE-30000797	SMD RES.	1/10W 75R J
	R075	VE-30000653	SMD RES.	1/10W 33R J
	R078	VE-30000774	SMD RES.	1/10W 680R J
	R079	VE-30000469	SMD RES.	1/10W 1K J
	R080	VE-30000774	SMD RES.	1/10W 680R J
	R081	VE-30000469	SMD RES.	1/10W 1K J
	R082	VE-30000469	SMD RES.	1/10W 1K J
	R083	VE-30000653	SMD RES.	1/10W 33R J
	R084	VE-30000710	SMD RES.	1/10W 47R J
	R094	VE-30000475	SMD RES.	1/10W 10K J
	R095	VE-30000475	SMD RES.	1/10W 10K J
	R096	VE-30000475	SMD RES.	1/10W 10K J
	R097	VE-30000529	SMD RES.	1/10W 1.5K J
	R098	VE-30000475	SMD RES.	1/10W 10K J
	R099	VE-30000475	SMD RES.	1/10W 10K J
	R100	VE-30000727	SMD RES.	1/10W 47K J
	R101	VE-30000471	CF RES.	1/4W 10K J
	R102	VE-30000747	SMD RES.	1/10W 560R J
	R103	VE-30000710	SMD RES.	1/10W 47R J
	R104	VE-30000457	SMD RES.	1/10W 10R J
	R105	VE-30000457	SMD RES.	1/10W 10R J
	R106	VE-30000567	SMD RES.	1/10W 18K J
	R108	VE-30000564	CF RES.	1/4W 18K J
	R200	VE-30000503	SMD RES.	1/10W 12K J
	R201	VE-30000723	CF RES.	1/4W 47K J
	R202	VE-30000459	CF RES.	1/4W 100R J
	R203	VE-30000471	CF RES.	1/4W 10K J
	R208	VE-30000459	CF RES.	1/4W 100R J
	R209	VE-30000459	CF RES.	1/4W 100R J
	R213	VE-30000597	SMD RES.	1/10W 22K J
	R300	VE-30000529	SMD RES.	1/10W 1.5K J
	R303	VE-30000469	SMD RES.	1/10W 1K J
	R304	VE-30000717	SMD RES.	1/10W 470R J
	R305	VE-30000717	SMD RES.	1/10W 470R J
	R306	VE-30000464	SMD RES.	1/10W 100R J
	R307	VE-30000464	SMD RES.	1/10W 100R J
	R308	VE-30000464	SMD RES.	1/10W 100R J
	R309	VE-30000660	CF RES.	1/4W 3.3K J
	R310	VE-30000660	CF RES.	1/4W 3.3K J
	R311	VE-30000531	CF RES.	1/4W 15K J
	R313	VE-30000534	SMD RES.	1/10W 15K J
	R314	VE-30000534	SMD RES.	1/10W 15K J
	R315	VE-30000534	SMD RES.	1/10W 15K J
	R341	VE-30000524	SMD RES.	1/10W 150R J
	R343	VE-30001248	FUSE RES.	1/4W 4.7R J
	R359	VE-30000464	SMD RES.	1/10W 100R J
	R360	VE-30000464	SMD RES.	1/10W 100R J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R361	VE-30000464	SMD RES.	1/10W 100R J
	R364	VE-30000464	SMD RES.	1/10W 100R J
	R378	VE-30000471	CF RES.	1/4W 10K J
	R379	VE-30000475	SMD RES.	1/10W 10K J
	R399	VE-30000717	SMD RES.	1/10W 470R J
	R400	VE-30000717	SMD RES.	1/10W 470R J
	R402	VE-30000706	CF RES.	1/4W 47R J
	R403	VE-30000659	SMD RES.	1/10W 330R J
	R404	VE-30000688	SMD RES.	1/10W 390R J
	R405	VE-30000469	SMD RES.	1/10W 1K J
	R407	VE-30000459	CF RES.	1/4W 100R J
	R418	VE-30000735	SMD RES.	1/10W 4.7R J
	R419	VE-30000710	SMD RES.	1/10W 47R J
	R420	VE-30000593	SMD RES.	1/10W 2.2K J
	R421	VE-30000499	SMD RES.	1/10W 1.2K J
	R422	VE-30000558	SMD RES.	1/10W 180R J
	R426	VE-30000659	SMD RES.	1/10W 330R J
	R428	VE-30000650	CF RES.	1/4W 33R J
	R429	VE-30000524	SMD RES.	1/10W 150R J
	R431	VE-30000459	CF RES.	1/4W 100R J
	R432	VE-30000459	CF RES.	1/4W 100R J
	R433	VE-30000475	SMD RES.	1/10W 10K J
	R437	VE-30000469	SMD RES.	1/10W 1K J
	R438	VE-30000499	SMD RES.	1/10W 1.2K J
	R439	VE-30000499	SMD RES.	1/10W 1.2K J
	R440	VE-30000499	SMD RES.	1/10W 1.2K J
	R446	VE-30000480	SMD RES.	1/10W 100K J
	R447	VE-30000464	SMD RES.	1/10W 100R J
	R448	VE-30000466	CF RES.	1/4W 1K J
	R449	VE-30000489	SMD RES.	1/10W 1R J
	R450	VE-30000631	SMD RES.	1/10W 2.7K J
	R451	VE-30000633	CF RES.	1/4W 27K J
	R452	VE-30000309	SMD CAP.	2.2NF 50V K R
	R453	VE-30000606	SMD RES.	1/10W 2.2M J
	R454	VE-30000534	SMD RES.	1/10W 15K J
	R455	VE-30000650	CF RES.	1/4W 33R J
	R456	VE-30000550	SMD RES.	1/10W 160K J
	R457	VE-30000606	SMD RES.	1/10W 2.2M J
	R458	VE-30000732	SMD RES.	1/10W 470K J
	R459	VE-30000697	SMD RES.	1/10W 39K G
	R460	VE-30000770	CF RES.	1/4W 680R J
	R465	VE-30006658	SMD RES.	1/10W 82R J
	R474	VE-30000597	SMD RES.	1/10W 22K J
	R475	VE-30000475	SMD RES.	1/10W 10K J
	R480	VE-30000751	SMD RES.	1/10W 5.6K J
	R481	VE-30000751	SMD RES.	1/10W 5.6K J
	R482	VE-30000751	SMD RES.	1/10W 5.6K J
	R483	VE-30000593	SMD RES.	1/10W 2.2K J
	R484	VE-30000752	CF RES.	1/4W 56K J
	R486	VE-30000721	SMD RES.	1/10W 4.7K J
	R488	VE-30000471	CF RES.	1/4W 10K J
	R489	VE-30000727	SMD RES.	1/10W 47K J
	R490	VE-30000751	SMD RES.	1/10W 5.6K J
	R492	VE-30000588	SMD RES.	1/10W 220R J
	R493	VE-30000588	SMD RES.	1/10W 220R J
	R494	VE-30000526	CF RES.	1/4W 1.5K J
	R498	VE-30000563	SMD RES.	1/10W 1.8K J
	R500	VE-30000469	SMD RES.	1/10W 1K J
	R502	VE-30000469	SMD RES.	1/10W 1K J
	R503	VE-30000469	SMD RES.	1/10W 1K J
	R507	VE-30000469	SMD RES.	1/10W 1K J
	R512	VE-30000727	SMD RES.	1/10W 47K J
	R513	VE-30000727	SMD RES.	1/10W 47K J
	R514	VE-30000727	SMD RES.	1/10W 47K J
	R515	VE-30000727	SMD RES.	1/10W 47K J
	R516	VE-30000464	SMD RES.	1/10W 100R J
	R517	VE-30000464	SMD RES.	1/10W 100R J
	R523	VE-30000475	SMD RES.	1/10W 10K J
	R524	VE-30000475	SMD RES.	1/10W 10K J
	R527	VE-30000721	SMD RES.	1/10W 4.7K J
	R528	VE-30000560	CF RES.	1/4W 1.8K J
	R529	VE-30000560	CF RES.	1/4W 1.8K J

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⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R530	VE-30000560	CF RES.	1/4W 1.8K J
	R532	VE-30000475	SMD RES.	1/10W 10K J
	R533	VE-30000721	SMD RES.	1/10W 4.7K J
	R535	VE-30000721	SMD RES.	1/10W 4.7K J
	R537	VE-30000593	SMD RES.	1/10W 2.2K J
	R538	VE-30000475	SMD RES.	1/10W 10K J
	R539	VE-30000475	SMD RES.	1/10W 10K J
	R540	VE-30000818	SMD RES.	1/10W 8.2K J
	R541	VE-30000721	SMD RES.	1/10W 4.7K J
	R542	VE-30000721	SMD RES.	1/10W 4.7K J
	R543	VE-30000717	SMD RES.	1/10W 470R J
	R548	VE-30000721	SMD RES.	1/10W 4.7K J
	R549	VE-30000531	CF RES.	1/4W 15K J
	R550	VE-30000721	SMD RES.	1/10W 4.7K J
	R551	VE-30000475	SMD RES.	1/10W 10K J
	R552	VE-30000593	SMD RES.	1/10W 2.2K J
	R554	VE-30000815	CF RES.	1/4W 8.2K J
	R556	VE-30000567	SMD RES.	1/10W 18K J
	R559	VE-30000588	SMD RES.	1/10W 220R J
	R560	VE-30000469	SMD RES.	1/10W 1K J
	R561	VE-30000692	SMD RES.	1/10W 3.9K J
	R562	VE-30000471	CF RES.	1/4W 10K J
	R563	VE-30000471	CF RES.	1/4W 10K J
	R564	VE-30000475	SMD RES.	1/10W 10K J
	R565	VE-30000475	SMD RES.	1/10W 10K J
	R566	VE-30010167	SMD RES.	1/10W 56R J
	R568	VE-30000475	SMD RES.	1/10W 10K J
	R569	VE-30000459	CF RES.	1/4W 100R J
	R570	VE-30000531	CF RES.	1/4W 15K J
	R571	VE-30000466	CF RES.	1/4W 1K J
	R572	VE-30000475	SMD RES.	1/10W 10K J
	R573	VE-30000721	SMD RES.	1/10W 4.7K J
	R574	VE-30000692	SMD RES.	1/10W 3.9K J
	R577	VE-30000475	SMD RES.	1/10W 10K J
	R578	VE-30000475	SMD RES.	1/10W 10K J
	R579	VE-30000721	SMD RES.	1/10W 4.7K J
	R580	VE-30000464	SMD RES.	1/10W 100R J
	R581	VE-30000588	SMD RES.	1/10W 220R J
	R582	VE-30000464	SMD RES.	1/10W 100R J
	R583	VE-30000475	SMD RES.	1/10W 10K J
	R584	VE-30000563	SMD RES.	1/10W 1.8K J
	R586	VE-30000480	SMD RES.	1/10W 100K J
	R587	VE-30000712	CF RES.	1/4W 470R J
	R590	VE-30000721	SMD RES.	1/10W 4.7K J
	R594	VE-30000475	SMD RES.	1/10W 10K J
	R595	VE-30000475	SMD RES.	1/10W 10K J
	R596	VE-30000475	SMD RES.	1/10W 10K J
	R601	VE-30000718	CF RES.	1/4W 4.7K J
	R602	VE-30000464	SMD RES.	1/10W 100R J
	R605	VE-30000466	CF RES.	1/4W 1K J
	R606	VE-30000704	CF RES.	1/4W 43K J
	R608	VE-30001235	FUSE RES.	1/2W 0.33R J
	R610	VE-30001171	MO RES.	2W 4.7K J
⚠	R611	VE-30001215	FUSE RES.	1W 1R J
	R613	VE-30000815	CF RES.	1/4W 8.2K J
	R614	VE-30000775	CF RES.	1/4W 6.8K J
	R615	VE-30000815	CF RES.	1/4W 8.2K J
	R617	VE-30000775	CF RES.	1/4W 6.8K J
	R618	VE-30000464	SMD RES.	1/10W 100R J
	R619	VE-30000815	CF RES.	1/4W 8.2K J
	R620	VE-30001082	MO RES.	1/2W 1K J
	R621	VE-30000459	CF RES.	1/4W 100R J
	R626	VE-30000466	CF RES.	1/4W 1K J
⚠	R628	VE-30001228	FUSE RES.	1/2W 2.2R J
⚠	R629	VE-30001232	FUSE RES.	1/4W 2.7R J
	R630	VE-30001082	MO RES.	1/2W 1K J
	R631	VE-30001171	MO RES.	2W 4.7K J
	R639	VE-30000542	SMD RES.	1/10W 1.5M J
	R700	VE-30000466	CF RES.	1/4W 1K J
	R703	VE-30000860	MF RES.	1/4W 1R F
⚠	R704	VE-30001251	FUSE RES.	1/2W 56R J
	R705	VE-30000580	CF RES.	1/4W 22R J
	R706	VE-30000949	MF RES.	1/4W 3K G
	R707	VE-30000712	CF RES.	1/4W 470R J
	R708	VE-30000469	SMD RES.	1/10W 1K J
	R709	VE-30000475	SMD RES.	1/10W 10K J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R710	VE-30000718	CF RES.	1/4W 4.7K J
	R711	VE-30000500	CF RES.	1/4W 12K J
	R714	VE-30000459	CF RES.	1/4W 100R J
	R715	VE-30000459	CF RES.	1/4W 100R J
	R716	VE-30000466	CF RES.	1/4W 1K J
	R717	VE-30000712	CF RES.	1/4W 470R J
	R805	VE-30000633	CF RES.	1/4W 27K J
	R806	VE-30001129	MO RES.	3W 22K J
	R807	VE-30000466	CF RES.	1/4W 1K J
	R808	VE-30000818	SMD RES.	1/10W 8.2K J
	R809	VE-30000469	SMD RES.	1/10W 1K J
	R810	VE-30000597	SMD RES.	1/10W 22K J
	R811	VE-30000597	SMD RES.	1/10W 22K J
	R812	VE-30000519	CF RES.	1/4W 150R J
	R813	VE-30000475	SMD RES.	1/10W 10K J
	R814	VE-30000706	CF RES.	1/4W 47R J
	R816	VE-30000540	CF RES.	1/2W 1.5M J (400V)
	R818	VE-30000466	CF RES.	1/4W 1K J
	R821	VE-30000602	SMD RES.	1/10W 220K J
	R822	VE-30001156	MO RES.	5W 33K J
	R823	VE-30000513	CF RES.	1/4W 130K J
	R824	VE-30000572	CF RES.	1/4W 2K J
	R828	VE-30007759	CF RES.	1W 47K J
	R829	VE-30000469	SMD RES.	1/10W 1K J
	R831	VE-30000471	CF RES.	1/4W 10K J
	R832	VE-30000721	SMD RES.	1/10W 4.7K J
	R833	VE-30000710	SMD RES.	1/10W 47R J
	R834	VE-30000818	SMD RES.	1/10W 8.2K J
	R835	VE-30000580	CF RES.	1/4W 22R J
	R836	VE-30000706	CF RES.	1/4W 47R J
	R844	VE-30000471	CF RES.	1/4W 10K J
⚠	R845	VE-30001257	MG RES.	1/2W 4.7M J
	R849	VE-30000534	SMD RES.	1/10W 15K J
	R850	VE-30000569	CF RES.	1/4W 180K J
	R858	VE-30000712	CF RES.	1/4W 470R J
	R868	VE-30000810	CF RES.	1/4W 820R J
	R869	VE-30000810	CF RES.	1/4W 820R J
	R870	VE-30001131	MO RES.	1W 0.22R J
	R871	VE-30000471	CF RES.	1/4W 10K J
	R872	VE-30007786	SMD RES.	1/10W 2.55K F
	R873	VE-30012852	SMD RES.	1/10W 3.9K F
	R879	VE-30000718	CF RES.	1/4W 4.7K J
	R885	VE-30000475	SMD RES.	1/10W 10K J
	R886	VE-30000475	SMD RES.	1/10W 10K J
	R888	VE-30000503	SMD RES.	1/10W 12K J
	R890	VE-30001089	MO RES.	2W 1R J
	R891	VE-30000466	CF RES.	1/4W 1K J
	R892	VE-30000531	CF RES.	1/4W 15K J
	R893	VE-30000477	CF RES.	1/4W 100K J
	R894	VE-30000660	CF RES.	1/4W 3.3K J
	R895	VE-30000638	CF RES.	1/4W 270K J
	CAPACITOR			
	C001	VE-30000375	EL CAP.	220UF 16V M
	C01	VE-30000332	SMD CAP.	4.7NF 50V K
	C010	VE-30000294	SMD CAP.	100NF 50V K
	C011	VE-30000294	SMD CAP.	100NF 50V K
	C012	VE-30000294	SMD CAP.	100NF 50V K
	C013	VE-30000375	EL CAP.	220UF 16V M
	C02	VE-30000332	SMD CAP.	4.7NF 50V K
	C028	VE-30000352	EL CAP.	100UF 16V M
	C029	VE-30000294	SMD CAP.	100NF 50V K
	C03	VE-30000332	SMD CAP.	4.7NF 50V K
	C030	VE-30000294	SMD CAP.	100NF 50V K
	C031	VE-30000294	SMD CAP.	100NF 50V K
	C032	VE-30000294	SMD CAP.	100NF 50V K
	C04	VE-30000332	SMD CAP.	4.7NF 50V K
	C051	VE-30000315	SMD CAP.	220NF 25V Z
	C052	VE-30000294	SMD CAP.	100NF 50V K
	C053	VE-30000315	SMD CAP.	220NF 25V Z
	C054	VE-30000315	SMD CAP.	220NF 25V Z
	C059	VE-30000300	SMD CAP.	1.5NF 50V K
	C060	VE-30000300	SMD CAP.	1.5NF 50V K
	C061	VE-30000242	SMD CAP.	330PF 50V J
	C062	VE-30000242	SMD CAP.	330PF 50V J

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⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C064	VE-30000300	SMD CAP.	1.5NF 50V K
	C065	VE-30000300	SMD CAP.	1.5NF 50V K
	C066	VE-30000242	SMD CAP.	330PF 50V J
	C067	VE-30000242	SMD CAP.	330PF 50V J
	C068	VE-30000345	EL CAP.	10UF 50V M
	C071	VE-30000315	SMD CAP.	220NF 25V Z
	C072	VE-30000294	SMD CAP.	100NF 50V K
	C073	VE-30000294	SMD CAP.	100NF 50V K
	C095	VE-30000289	SMD CAP.	10NF 50V K R
	C097	VE-30000189	SMD CAP.	100PF 50V J
	C098	VE-30000224	SMD CAP.	220PF 50V J
	C099	VE-30000189	SMD CAP.	100PF 50V J
	C101	VE-30000336	SMD CAP.	5.6NF 50V K
	C102	VE-30000345	EL CAP.	10UF 50V M
	C107	VE-30000336	SMD CAP.	5.6NF 50V K
	C108	VE-30000312	SMD CAP.	22NF 50V K
	C109	VE-30000332	SMD CAP.	4.7NF 50V K
	C110	VE-30000312	SMD CAP.	22NF 50V K
	C111	VE-30000332	SMD CAP.	4.7NF 50V K
	C112	VE-30000109	MKT CAP.	470NF 63V J
	C113	VE-30000109	MKT CAP.	470NF 63V J
	C116	VE-30000082	MKT CAP.	15NF 63V J
	C117	VE-30000082	MKT CAP.	15NF 63V J
	C201	VE-30000352	EL CAP.	100UF 16V M
	C203	VE-30000345	EL CAP.	10UF 50V M
	C204	VE-30000345	EL CAP.	10UF 50V M
	C211	VE-30000294	SMD CAP.	100NF 50V K
	C212	VE-30000190	CER CAP.	100PF 50V J CH
	C279	VE-30000263	SMD CAP.	56PF 50V J CH
	C301	VE-30000216	SMD CAP.	1.8PF 50V J CH
	C302	VE-30000216	SMD CAP.	1.8PF 50V J CH
	C304	VE-30000289	SMD CAP.	10NF 50V K R
	C306	VE-30000345	EL CAP.	10UF 50V M
	C307	VE-30000294	SMD CAP.	100NF 50V K
	C308	VE-30000074	MKT CAP.	100NF 63V J
	C309	VE-30000345	EL CAP.	10UF 50V M
	C316	VE-30000284	SMD CAP.	1NF 50V K R
	C317	VE-30000284	SMD CAP.	1NF 50V K R
	C318	VE-30000074	MKT CAP.	100NF 63V J
	C319	VE-30000393	EL CAP.	3.3UF 50V M
	C320	VE-30000294	SMD CAP.	100NF 50V K
	C321	VE-30000345	EL CAP.	10UF 50V M
	C322	VE-30000345	EL CAP.	10UF 50V M
	C323	VE-30000345	EL CAP.	10UF 50V M
	C326	VE-30000371	EL CAP.	22UF 50V M
	C327	VE-30000371	EL CAP.	22UF 50V M
	C328	VE-30000284	SMD CAP.	1NF 50V K R
	C329	VE-30000284	SMD CAP.	1NF 50V K R
	C330	VE-30000284	SMD CAP.	1NF 50V K R
	C331	VE-30000284	SMD CAP.	1NF 50V K R
	C332	VE-30000417	EL CAP.	6.8UF 50V M
	C333	VE-30000294	SMD CAP.	100NF 50V K
	C334	VE-30000345	EL CAP.	10UF 50V M
	C335	VE-30000252	SMD CAP.	47PF 50V J
	C336	VE-30000252	SMD CAP.	47PF 50V J
	C338	VE-30000371	EL CAP.	22UF 50V M
	C339	VE-30000256	SMD CAP.	470PF 50V J
	C340	VE-30000100	MKT CAP.	330NF 63V J
	C341	VE-30000256	SMD CAP.	470PF 50V J
	C342	VE-30000100	MKT CAP.	330NF 63V J
	C343	VE-30000224	SMD CAP.	220PF 50V J
	C344	VE-30000100	MKT CAP.	330NF 63V J
	C346	VE-30000224	SMD CAP.	220PF 50V J
	C347	VE-30000371	EL CAP.	22UF 50V M
	C348	VE-30000224	SMD CAP.	220PF 50V J
	C349	VE-30000100	MKT CAP.	330NF 63V J
	C350	VE-30000224	SMD CAP.	220PF 50V J
	C351	VE-30000100	MKT CAP.	330NF 63V J
	C352	VE-30000224	SMD CAP.	220PF 50V J
	C353	VE-30000100	MKT CAP.	330NF 63V J
	C355	VE-30000284	SMD CAP.	1NF 50V K R
	C357	VE-30000294	SMD CAP.	100NF 50V K
	C358	VE-30000345	EL CAP.	10UF 50V M
	C364	VE-30000284	SMD CAP.	1NF 50V K R
	C365	VE-30000384	EL CAP.	2.2UF 50V M
	C366	VE-30000294	SMD CAP.	100NF 50V K

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C368	VE-30000294	SMD CAP.	100NF 50V K
	C369	VE-30000294	SMD CAP.	100NF 50V K
	C370	VE-30000384	EL CAP.	2.2UF 50V M
	C371	VE-30000109	MKT CAP.	470NF 63V J
	C373	VE-30000371	EL CAP.	22UF 50V M
	C374	VE-30000294	SMD CAP.	100NF 50V K
	C379	VE-30000294	SMD CAP.	100NF 50V K
	C385	VE-30000294	SMD CAP.	100NF 50V K
	C400	VE-30000294	SMD CAP.	100NF 50V K
	C401	VE-30000371	EL CAP.	22UF 50V M
	C402	VE-30000345	EL CAP.	10UF 50V M
	C403	VE-30000074	MKT CAP.	100NF 63V J
	C403	VE-30000294	SMD CAP.	100NF 50V K
	C404	VE-30000284	SMD CAP.	1NF 50V K R
	C405	VE-30000345	EL CAP.	10UF 50V M
	C405	VE-30000294	SMD CAP.	100NF 50V K
	C406	VE-30000313	CER CAP.	22NF 50V Z F
	C406	VE-30000284	SMD CAP.	1NF 50V K R
	C407	VE-30000384	EL CAP.	2.2UF 50V M
	C407	VE-30000284	SMD CAP.	1NF 50V K R
	C408	VE-30000283	CER CAP.	1NF 50V K B
	C409	VE-30000334	SMD CAP.	47NF 50V K
	C410	VE-30000345	EL CAP.	10UF 50V M
	C411	VE-30000334	SMD CAP.	47NF 50V K
	C412	VE-30000312	SMD CAP.	22NF 50V K
	C413	VE-30000375	EL CAP.	220UF 16V M
	C415	VE-30000092	MKT CAP.	220NF 63V J
	C416	VE-30000312	SMD CAP.	22NF 50V K
	C417	VE-30000312	SMD CAP.	22NF 50V K
	C418	VE-30000312	SMD CAP.	22NF 50V K
	C419	VE-30000315	SMD CAP.	220NF 25V Z
	C421	VE-30000220	SMD CAP.	22PF 50V J
	C422	VE-30000220	SMD CAP.	22PF 50V J
	C423	VE-30000322	SMD CAP.	3.3NF 50V K
	C424	VE-30000294	SMD CAP.	100NF 50V K
	C425	VE-30000312	SMD CAP.	22NF 50V K
	C426	VE-30000353	EL CAP.	100UF 25V M
	C427	VE-30000294	SMD CAP.	100NF 50V K
	C428	VE-30000345	EL CAP.	10UF 50V M
	C430	VE-30000289	SMD CAP.	10NF 50V K R
	C431	VE-30000362	EL CAP.	1UF 50V M
	C433	VE-30000284	SMD CAP.	1NF 50V K R
	C434	VE-30000284	SMD CAP.	1NF 50V K R
	C435	VE-30000074	MKT CAP.	100NF 63V J
	C436	VE-30000074	MKT CAP.	100NF 63V J
	C437	VE-30000362	EL CAP.	1UF 50V M
	C438	VE-30000312	SMD CAP.	22NF 50V K
	C439	VE-30000284	SMD CAP.	1NF 50V K R
	C440	VE-30000345	EL CAP.	10UF 50V M
	C446	VE-30000252	SMD CAP.	47PF 50V J
	C447	VE-30000252	SMD CAP.	47PF 50V J
	C448	VE-30000189	SMD CAP.	100PF 50V J
	C450	VE-30000294	SMD CAP.	100NF 50V K
	C451	VE-30000290	CER CAP.	10NF 50V Z F
	C452	VE-30000290	CER CAP.	10NF 50V Z F
	C453	VE-30000312	SMD CAP.	22NF 50V K
	C459	VE-30000332	SMD CAP.	4.7NF 50V K
	C465	VE-30000300	SMD CAP.	1.5NF 50V K
	C490	VE-30000284	SMD CAP.	1NF 50V K R
	C497	VE-30000300	SMD CAP.	1.5NF 50V K
	C498	VE-30000189	SMD CAP.	100PF 50V J
	C499	VE-30000300	SMD CAP.	1.5NF 50V K
	C505	VE-30000294	SMD CAP.	100NF 50V K
	C513	VE-30000294	SMD CAP.	100NF 50V K
	C514	VE-30000345	EL CAP.	10UF 50V M
	C516	VE-30000371	EL CAP.	22UF 50V M
	C517	VE-30000352	EL CAP.	100UF 16V M
	C521	VE-30000109	MKT CAP.	470NF 63V J
	C524	VE-30000237	SMD CAP.	33PF 50V J
	C525	VE-30000237	SMD CAP.	33PF 50V J
	C526	VE-30000294	SMD CAP.	100NF 50V K
	C530	VE-30000294	SMD CAP.	100NF 50V K
	C531	VE-30000294	SMD CAP.	100NF 50V K
	C532	VE-30000294	SMD CAP.	100NF 50V K
	C533	VE-30000294	SMD CAP.	100NF 50V K
	C537	VE-30000294	SMD CAP.	100NF 50V K

[AV28BT7EES / AV28BT7EEB]

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C538	VE-30000294	SMD CAP.	100NF 50V K
	C539	VE-30000294	SMD CAP.	100NF 50V K
	C540	VE-30000294	SMD CAP.	100NF 50V K
	C570	VE-30000371	EL CAP.	22UF 50V M
	C571	VE-30000371	EL CAP.	22UF 50V M
	C572	VE-30000371	EL CAP.	22UF 50V M
	C573	VE-30000371	EL CAP.	22UF 50V M
	C576	VE-30000201	SMD CAP.	15PF 50V J
	C577	VE-30000201	SMD CAP.	15PF 50V J
	C580	VE-30000387	EL CAP.	33UF 50V M
	C583	VE-30000294	SMD CAP.	100NF 50V K
	C590	VE-30000294	SMD CAP.	100NF 50V K
	C596	VE-30000289	SMD CAP.	10NF 50V K R
	C597	VE-30000289	SMD CAP.	10NF 50V K R
	C598	VE-30000289	SMD CAP.	10NF 50V K R
	C599	VE-30000334	SMD CAP.	47NF 50V K
	C600	VE-30000289	SMD CAP.	10NF 50V K R
	C601	VE-30000355	EL CAP.	100UF 50V M
	C603	VE-30000309	SMD CAP.	2.2NF 50V K R
	C604	VE-30000107	MKT CAP.	47NF 250V J
	C605	VE-30000075	MKT CAP.	100NF 250V K (DC)
	C606	VE-30000406	EL CAP.	47UF 250V M (HR)
	C607	VE-30000407	EL CAP.	470UF 16V M
	C608	VE-30009206	SMD CAP.	15NF 50V K R
	C610	VE-30000123	PP CAP.	33NF 630V K
	C611	VE-30000143	MKP CAP.	2.2NF 2KV %3.5
	C612	VE-30000356	EL CAP.	100UF 63V M
	C613	VE-30000121	KP CAP.	27NF 630V J
	C617	VE-30000172	MKP CAP.	680NF 250V J (P=15)
	C618	VE-30000078	MKT CAP.	1UF 100V M
	C620	VE-30000433	CER CAP.	1NF 1KV M B
	C621	VE-30000078	MKT CAP.	1UF 100V M
	C625	VE-30000315	SMD CAP.	220NF 25V Z
	C626	VE-30000180	MKP CAP.	9.1NF 2000V %3.5
	C627	VE-30000340	SMD CAP.	6.8NF 50V K
	C630	VE-30000156	MKP CAP.	430NF 250V J
	C632	VE-30016086	EL CAP.	1000UF 25V 105°
	C650	VE-30000280	SMD CAP.	820PF 50V J
	C660	VE-30009208	CER CAP.	470PF 1KV K (PULSE)
	C661	VE-30009208	CER CAP.	470PF 1KV K (PULSE)
	C700	VE-30000190	CER CAP.	100PF 50V J CH
	C702	VE-30000356	EL CAP.	100UF 63V M
	C704	VE-30016085	EL CAP.	10UF 63V 105°
	C705	VE-30000071	MKT CAP.	10NF 63V J
	C706	VE-30000092	MKT CAP.	220NF 63V J
	C707	VE-30000069	MKT CAP.	1NF 100V J
	C708	VE-30000189	SMD CAP.	100PF 50V J
	C709	VE-30000294	SMD CAP.	100NF 50V K
	C715	VE-30000189	SMD CAP.	100PF 50V J
⚠	C801	VE-30000084	MKT CAP.	150NF 275V M AC P=15
⚠	C802	VE-30000084	MKT CAP.	150NF 275V M AC P=15
	C803	VE-30000189	SMD CAP.	100PF 50V J
	C804	VE-30000421	EL CAP.	220UF 400V M (FOR 28'')
	C806	VE-30000342	CER CAP.	820PF 50V K B
	C807	VE-30000074	MKT CAP.	100NF 63V J
	C808	VE-30000284	SMD CAP.	1NF 50V K R
	C809	VE-30000309	SMD CAP.	2.2NF 50V K R
	C810	VE-30000076	MKT CAP.	100NF 275V M AC
	C811	VE-30000161	MKP CAP.	47NF 630V J
	C813	VE-30000411	EL CAP.	4700UF 16V M
	C814	VE-30000294	SMD CAP.	100NF 50V K
	C816	VE-30000295	CER CAP.	100NF 50V Z F
	C817	VE-30000359	EL CAP.	1000UF 16V M
	C819	VE-30000295	CER CAP.	100NF 50V Z F
	C821	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C822	VE-30000295	CER CAP.	100NF 50V Z F
	C823	VE-30000383	EL CAP.	2200UF 25V M
	C824	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C825	VE-30000295	CER CAP.	100NF 50V Z F
	C826	VE-30000383	EL CAP.	2200UF 25V M
	C827	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C828	VE-30000359	EL CAP.	1000UF 16V M
	C829	VE-30000406	EL CAP.	47UF 250V M (HR)
	C830	VE-30000295	CER CAP.	100NF 50V Z F
	C831	VE-30000198	CER CAP.	120PF 500V J SL
	C832	VE-30000294	SMD CAP.	100NF 50V K

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C835	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C845	VE-30000375	EL CAP.	220UF 16V M
	C846	VE-30000433	CER CAP.	1NF 1KV M B
	C847	VE-30000375	EL CAP.	220UF 16V M
	C848	VE-30000353	EL CAP.	100UF 25V M
	C850	VE-30000433	CER CAP.	1NF 1KV M B
	C851	VE-30000433	CER CAP.	1NF 1KV M B
	C852	VE-30000433	CER CAP.	1NF 1KV M B
	C853	VE-30000289	SMD CAP.	10NF 50V K R
	C854	VE-30008805	MKT CAP.	39NF 63V J
	C855	VE-30000284	SMD CAP.	1NF 50V K R
	C860	VE-30000440	CER CAP.	2.2NF 4KV M
	C865	VE-30000440	CER CAP.	2.2NF 4KV M
	C890	VE-30000396	EL CAP.	47UF 16V M
	C891	VE-30000335	CER CAP.	47NF 50V Z F
	C892	VE-30000295	CER CAP.	100NF 50V Z F
	COIL			
	L001	VE-30002016	FIXED COIL	150UH Q60 K
	L002	VE-30010964	FERRITE BEAT	
	L050	VE-30002015	FIXED COIL	150UH Q50 K (RAD)
	L051	VE-30002015	FIXED COIL	150UH Q50 K (RAD)
	L054	VE-30010964	FERRITE BEAT	
	L201	VE-30001979	FIXED COIL	1UH Q45 M-A
	L202	VE-30010964	FERRITE BEAT	
	L301	VE-30001987	FIXED COIL	4.7UH Q70 K-A
	L302	VE-30001987	FIXED COIL	4.7UH Q70 K-A
	L303	VE-30001987	FIXED COIL	4.7UH Q70 K-A
	L304	VE-30001986	FIXED COIL	3.3UH Q65 K
	L306	VE-30002002	FIXED COIL	47UH Q60 K
	L307	VE-30002002	FIXED COIL	47UH Q60 K
	L308	VE-30002002	FIXED COIL	47UH Q60 K
	L309	VE-30002002	FIXED COIL	47UH Q60 K
	L402	VE-30001986	FIXED COIL	3.3UH Q65 K
	L403	VE-30001990	FIXED COIL	6.8UH Q75 K
	L405	VE-30001992	FIXED COIL	10UH Q65 K-A
	L406	VE-30001992	FIXED COIL	10UH Q65 K-A
	L407	VE-30001992	FIXED COIL	10UH Q65 K-A
	L408	VE-30001979	FIXED COIL	1UH Q45 M-A
	L502	VE-30001992	FIXED COIL	10UH Q65 K-A
	L504	VE-30001992	FIXED COIL	10UH Q65 K-A
	L505	VE-30001992	FIXED COIL	10UH Q65 K-A
	L506	VE-30001992	FIXED COIL	10UH Q65 K-A
	L515	VE-30001992	FIXED COIL	10UH Q65 K-A
	L602	VE-30002026	FIXED COIL	1MH AK19 25/28
	L603	VE-30002156	LINEARITY COIL	30UH 110' (AK19)
	L604	VE-30002031	FIXED COIL	INJECTION 15MH
	L605	VE-30001999	FIXED COIL	40UH (LOSS COIL)
	L801	VE-30001984	FIXED COIL	2.2UH Q55 M-AX
	L803	VE-30002011	CHOKE COIL	150UH 0.82A RAD
	DIODE			
	D001	VE-30001284	DIODE	
	D002	VE-30001284	DIODE	
	D003	VE-30001284	DIODE	
	D004	VE-30001284	DIODE	
	D100	VE-30001284	DIODE	
	D201	VE-30001284	DIODE	
	D301	VE-30001369	ZENER DIODE	
	D302	VE-30001284	DIODE	
	D408	VE-30001347	ZENER DIODE	
	D409	VE-30001284	DIODE	
	D410	VE-30001284	DIODE	
	D420	VE-30001285	DIODE	
	D500	VE-30012412	ZENER DIODE	
	D503	VE-30001284	DIODE	
	D504	VE-30001284	DIODE	
	D505	VE-30012412	ZENER DIODE	
	D509	VE-30001284	DIODE	
	D555	VE-30001285	DIODE	
	D583	VE-30001284	DIODE	
	D601	VE-30001318	DIODE	
	D602	VE-30001285	DIODE	
	D603	VE-30001284	DIODE	
	D604	VE-30001377	ZENER DIODE	

[AV28BT7EES / AV28BT7EEB]

⚠	Symbol No.	Part No.	Part Name	Description
	DIODE			
	D605	VE-30001318	DIODE	
	D606	VE-30001318	DIODE	
	D607	VE-30001285	DIODE	
	D608	VE-30001284	DIODE	
	D609	VE-30001318	DIODE	
	D611	VE-30001323	DIODE	
	D612	VE-30001320	DIODE	
	D698	VE-30001318	DIODE	
	D701	VE-30001284	DIODE	
	D801	VE-30001329	DIODE	
	D802	VE-30001329	DIODE	
	D803	VE-30001329	DIODE	
	D804	VE-30001329	DIODE	
	D805	VE-30001318	DIODE	
	D807	VE-30001318	DIODE	
	D811	VE-30001315	DIODE	
	D812	VE-30001315	DIODE	
	D813	VE-30001288	DIODE	
	D814	VE-30001307	DIODE	
	D815	VE-30001307	DIODE	
	D816	VE-30007681	DIODE	
	D818	VE-30001318	DIODE	
	D819	VE-30001349	ZENER DIODE	
	D823	VE-30001284	DIODE	
	D826	VE-30001318	DIODE	
	D827	VE-30001318	DIODE	
	D858	VE-30001371	ZENER DIODE	
	D864	VE-30001285	DIODE	
	D890	VE-30001284	DIODE	
	TRANSISTOR			
	Q001	VE-30001455	TR	
	Q055	VE-30001454	TR	
	Q100	VE-30001454	TR	
	Q301	VE-30001455	TR	
	Q402	VE-30001454	TR	
	Q406	VE-30001454	TR	
	Q407	VE-30001454	TR	
	Q415	VE-30001454	TR	
	Q418	VE-30001454	TR	
	Q420	VE-30001454	TR	
	Q503	VE-30001455	TR	
	Q512	VE-30001455	TR	
	Q514	VE-30001454	TR	
	Q515	VE-30001454	TR	
	Q516	VE-30001454	TR	
	Q517	VE-30001454	TR	
	Q518	VE-30001454	TR	
	Q521	VE-30001454	TR	
	Q522	VE-30001454	TR	
	Q601	VE-30001455	TR	
	Q603	VE-20000963	HE.ASY.	
	Q604	VE-30001435	TR	
	Q605	VE-30001441	TR	
	Q701	VE-30001455	TR	
	Q702	VE-30001454	TR	
	Q802	VE-20073672	HE.ASY.	
	Q805	VE-30001454	TR	
	Q806	VE-30001454	TR	
	Q807	VE-30001454	TR	
	Q809	VE-30001506	IC	
	Q810	VE-30001384	TR	
	Q890	VE-30001428	TR	
	IC			
	IC050	VE-30001619	IC	
	IC301	VE-30001664	IC	
	IC307	VE-30001495	IC	
	IC401	VE-30001579	IC	
	IC501	VE-20075294	PR.IC	(MYCOM)
	IC502	VE-20073446	IC	(MEMORY)
	IC701	VE-30002736	IC	
⚠	IC801	VE-30007069	IC	

⚠	Symbol No.	Part No.	Part Name	Description
	IC			
	IC802	VE-30001499	IC	
	IC804	VE-20058533	HE.ASY.	
	IC805	VE-30001500	IC	
	IC807	VE-30001622	IC	
	OTHER			
⚠	F801	VE-20000848	FUSE ASSY	(2.5A)
	J129	VE-30001997	FIXED COIL	33UH Q60 J
	J314	VE-20058569	MD.ASY.	
	J500	VE-30010964	FERRITE BEAT	
	J616	VE-30006712	BEAD FERRITE	3.5X4.7X0.8
	PL002	VE-30001912	PIN F	5P/2.5MM (11.5MM)
	PL892	VE-30007118	PIN F	2P/7.5MM
	PL893	VE-30007118	PIN F	2P/7.5MM
	TH801	VE-30001268	THERMISTOR	
	TR601	VE-30002090	LINE DRIVER	
⚠	TR602	VE-30002054	TR	
⚠	TR801	VE-30002103	LINE FILTER	
⚠	TR802	VE-30002080	TR	
	TU201	VE-30009637	TUNER	
	VL301	VE-30002037	ADJ COIL	
	VR801	VE-30001064	ADJ RES.	470R 0.1W VER (MAN)
	X301	VE-30001756	XTAL	
	X401	VE-30001748	XTAL	
	X404	VE-30001745	XTAL	
	X501	VE-30006662	XTAL	
	Z209	VE-30001728	TR	
	Z301	VE-30001706	SAW FILTER	
	Z302	VE-30001692	SAW FILTER	
	Z401	VE-30001695	SAW FILTER	

MULTI SOUND P.W. BOARD ASS'Y (VE-20078991)

Refer to PARTS LIST in page 24 for this P.W. board.

CRT SOCKET P.W. BOARD ASS'Y (VE-20074437)

Refer to PARTS LIST in page 25 for this P.W. board.

FRONT CONTROL P.W. BOARD ASS'Y (VE-20001612)

Refer to PARTS LIST in page 25 for this P.W. board.

FRONT AV + HEADPHONE JACK P.W. BOARD ASS'Y (VE-20083646)

Refer to PARTS LIST in page 25 for this P.W. board.

PROTECTION MODULE P.W. BOARD ASS'Y (VE-20058569)

Refer to PARTS LIST in page 25 for this P.W. board.

T(SPOT KILLER) MODULE P.W. BOARD ASS'Y (VE-20019598)

Refer to PARTS LIST in page 25 for this P.W. board.

PRINTED WIRING BOARD PARTS LIST

[AV28BT7EPS / AV27BT7EPB]

MAIN P.W. BOARD ASS'Y (VE-20071473)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R001	VE-30000471	CF RES.	1/4W 10K J
	R001	VE-30000631	SMD RES.	1/10W 2.7K J
	R002	VE-30000471	CF RES.	1/4W 10K J
	R002	VE-30000631	SMD RES.	1/10W 2.7K J
	R003	VE-30000770	CF RES.	1/4W 680R J
	R010	VE-30000797	SMD RES.	1/10W 75R J
	R011	VE-30000480	SMD RES.	1/10W 100K J
	R012	VE-30000480	SMD RES.	1/10W 100K J
	R014	VE-30000477	CF RES.	1/4W 100K J
	R015	VE-30000480	SMD RES.	1/10W 100K J
	R040	VE-30000797	SMD RES.	1/10W 75R J
	R041	VE-30000797	SMD RES.	1/10W 75R J
	R044	VE-30000459	CF RES.	1/4W 100R J
	R045	VE-30000524	SMD RES.	1/10W 150R J
	R049	VE-30000717	SMD RES.	1/10W 470R J
	R050	VE-30000464	SMD RES.	1/10W 100R J
	R051	VE-30000464	SMD RES.	1/10W 100R J
	R065	VE-30000797	SMD RES.	1/10W 75R J
	R066	VE-30000774	SMD RES.	1/10W 680R J
	R067	VE-30000469	SMD RES.	1/10W 1K J
	R068	VE-30000774	SMD RES.	1/10W 680R J
	R069	VE-30000469	SMD RES.	1/10W 1K J
	R070	VE-30000588	SMD RES.	1/10W 220R J
	R071	VE-30000588	SMD RES.	1/10W 220R J
	R072	VE-30000588	SMD RES.	1/10W 220R J
	R073	VE-30000797	SMD RES.	1/10W 75R J
	R075	VE-30000653	SMD RES.	1/10W 33R J
	R078	VE-30000774	SMD RES.	1/10W 680R J
	R079	VE-30000469	SMD RES.	1/10W 1K J
	R080	VE-30000774	SMD RES.	1/10W 680R J
	R081	VE-30000469	SMD RES.	1/10W 1K J
	R082	VE-30000469	SMD RES.	1/10W 1K J
	R083	VE-30000653	SMD RES.	1/10W 33R J
	R084	VE-30000710	SMD RES.	1/10W 47R J
	R094	VE-30000475	SMD RES.	1/10W 10K J
	R095	VE-30000475	SMD RES.	1/10W 10K J
	R096	VE-30000475	SMD RES.	1/10W 10K J
	R097	VE-30000529	SMD RES.	1/10W 1.5K J
	R098	VE-30000475	SMD RES.	1/10W 10K J
	R099	VE-30000475	SMD RES.	1/10W 10K J
	R100	VE-30000727	SMD RES.	1/10W 47K J
	R101	VE-30000471	CF RES.	1/4W 10K J
	R102	VE-30000747	SMD RES.	1/10W 560R J
	R103	VE-30000710	SMD RES.	1/10W 47R J
	R104	VE-30000457	SMD RES.	1/10W 10R J
	R105	VE-30000457	SMD RES.	1/10W 10R J
	R106	VE-30000567	SMD RES.	1/10W 18K J
	R108	VE-30000564	CF RES.	1/4W 18K J
	R200	VE-30000503	SMD RES.	1/10W 12K J
	R201	VE-30000723	CF RES.	1/4W 47K J
	R202	VE-30000459	CF RES.	1/4W 100R J
	R203	VE-30000471	CF RES.	1/4W 10K J
	R208	VE-30000459	CF RES.	1/4W 100R J
	R209	VE-30000459	CF RES.	1/4W 100R J
	R213	VE-30000597	SMD RES.	1/10W 22K J
	R3	VE-30000653	SMD RES.	1/10W 33R J
	R300	VE-30000529	SMD RES.	1/10W 1.5K J
	R303	VE-30000469	SMD RES.	1/10W 1K J
	R304	VE-30000717	SMD RES.	1/10W 470R J
	R305	VE-30000717	SMD RES.	1/10W 470R J
	R306	VE-30000464	SMD RES.	1/10W 100R J
	R307	VE-30000464	SMD RES.	1/10W 100R J
	R308	VE-30000464	SMD RES.	1/10W 100R J
	R309	VE-30000660	CF RES.	1/4W 3.3K J
	R310	VE-30000660	CF RES.	1/4W 3.3K J
	R311	VE-30000531	CF RES.	1/4W 15K J
	R313	VE-30000534	SMD RES.	1/10W 15K J
	R314	VE-30000534	SMD RES.	1/10W 15K J
	R315	VE-30000534	SMD RES.	1/10W 15K J
	R316	VE-30000469	SMD RES.	1/10W 1K J
	R319	VE-30000469	SMD RES.	1/10W 1K J
	R321	VE-30000664	SMD RES.	1/10W 3.3K J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R331	VE-30000668	SMD RES.	1/10W 33K J
	R332	VE-30000475	SMD RES.	1/10W 10K J
	R333	VE-30000668	SMD RES.	1/10W 33K J
	R334	VE-30000480	SMD RES.	1/10W 100K J
	R340	VE-30000727	SMD RES.	1/10W 47K J
	R341	VE-30000524	SMD RES.	1/10W 150R J
	R343	VE-30001248	FUSE RES.	1/4W 4.7R J
	R344	VE-30000766	SMD RES.	1/10W 620K J
	R345	VE-30000499	SMD RES.	1/10W 1.2K J
	R346	VE-30000835	SMD RES.	1/10W 910R J
	R347	VE-30000563	SMD RES.	1/10W 1.8K J
	R359	VE-30000464	SMD RES.	1/10W 100R J
	R360	VE-30000464	SMD RES.	1/10W 100R J
	R361	VE-30000464	SMD RES.	1/10W 100R J
	R364	VE-30000464	SMD RES.	1/10W 100R J
	R378	VE-30000471	CF RES.	1/4W 10K J
	R379	VE-30000475	SMD RES.	1/10W 10K J
	R399	VE-30000717	SMD RES.	1/10W 470R J
	R400	VE-30000717	SMD RES.	1/10W 470R J
	R402	VE-30000706	CF RES.	1/4W 47R J
	R403	VE-30000659	SMD RES.	1/10W 330R J
	R404	VE-30000688	SMD RES.	1/10W 390R J
	R405	VE-30000469	SMD RES.	1/10W 1K J
	R407	VE-30000459	CF RES.	1/4W 100R J
	R418	VE-30000735	SMD RES.	1/10W 4.7R J
	R419	VE-30000710	SMD RES.	1/10W 47R J
	R420	VE-30000593	SMD RES.	1/10W 2.2K J
	R421	VE-30000499	SMD RES.	1/10W 1.2K J
	R422	VE-30000558	SMD RES.	1/10W 180R J
	R426	VE-30000659	SMD RES.	1/10W 330R J
	R429	VE-30000524	SMD RES.	1/10W 150R J
	R431	VE-30000459	CF RES.	1/4W 100R J
	R432	VE-30000459	CF RES.	1/4W 100R J
	R433	VE-30000475	SMD RES.	1/10W 10K J
	R437	VE-30000469	SMD RES.	1/10W 1K J
	R438	VE-30000499	SMD RES.	1/10W 1.2K J
	R439	VE-30000499	SMD RES.	1/10W 1.2K J
	R440	VE-30000499	SMD RES.	1/10W 1.2K J
	R446	VE-30000480	SMD RES.	1/10W 100K J
	R447	VE-30000464	SMD RES.	1/10W 100R J
	R448	VE-30000466	CF RES.	1/4W 1K J
	R449	VE-30000489	SMD RES.	1/10W 1R J
	R450	VE-30000631	SMD RES.	1/10W 2.7K J
	R451	VE-30000633	CF RES.	1/4W 27K J
	R452	VE-30000309	SMD CAP.	2.2NF 50V K R
	R453	VE-30000606	SMD RES.	1/10W 2.2M J
	R454	VE-30000534	SMD RES.	1/10W 15K J
	R455	VE-30000650	CF RES.	1/4W 33R J
	R456	VE-30000550	SMD RES.	1/10W 160K J
	R457	VE-30000606	SMD RES.	1/10W 2.2M J
	R458	VE-30000732	SMD RES.	1/10W 470K J
	R459	VE-30000697	SMD RES.	1/10W 39K G
	R460	VE-30000770	CF RES.	1/4W 680R J
	R465	VE-30006658	SMD RES.	1/10W 82R J
	R474	VE-30000597	SMD RES.	1/10W 22K J
	R475	VE-30000475	SMD RES.	1/10W 10K J
	R486	VE-30000721	SMD RES.	1/10W 4.7K J
	R488	VE-30000471	CF RES.	1/4W 10K J
	R492	VE-30000588	SMD RES.	1/10W 220R J
	R493	VE-30000588	SMD RES.	1/10W 220R J
	R494	VE-30000526	CF RES.	1/4W 1.5K J
	R498	VE-30000563	SMD RES.	1/10W 1.8K J
	R500	VE-30000469	SMD RES.	1/10W 1K J
	R502	VE-30000469	SMD RES.	1/10W 1K J
	R503	VE-30000469	SMD RES.	1/10W 1K J
	R507	VE-30000469	SMD RES.	1/10W 1K J
	R512	VE-30000727	SMD RES.	1/10W 47K J
	R513	VE-30000727	SMD RES.	1/10W 47K J
	R514	VE-30000727	SMD RES.	1/10W 47K J
	R515	VE-30000727	SMD RES.	1/10W 47K J
	R516	VE-30000464	SMD RES.	1/10W 100R J
	R517	VE-30000464	SMD RES.	1/10W 100R J

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⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R523	VE-30000475	SMD RES.	1/10W 10K J
	R524	VE-30000475	SMD RES.	1/10W 10K J
	R527	VE-30000721	SMD RES.	1/10W 4.7K J
	R528	VE-30000560	CF RES.	1/4W 1.8K J
	R529	VE-30000560	CF RES.	1/4W 1.8K J
	R530	VE-30000560	CF RES.	1/4W 1.8K J
	R532	VE-30000475	SMD RES.	1/10W 10K J
	R533	VE-30000721	SMD RES.	1/10W 4.7K J
	R535	VE-30000721	SMD RES.	1/10W 4.7K J
	R537	VE-30000593	SMD RES.	1/10W 2.2K J
	R538	VE-30000475	SMD RES.	1/10W 10K J
	R539	VE-30000475	SMD RES.	1/10W 10K J
	R540	VE-30000818	SMD RES.	1/10W 8.2K J
	R541	VE-30000721	SMD RES.	1/10W 4.7K J
	R542	VE-30000721	SMD RES.	1/10W 4.7K J
	R543	VE-30000717	SMD RES.	1/10W 470R J
	R548	VE-30000721	SMD RES.	1/10W 4.7K J
	R549	VE-30000531	CF RES.	1/4W 15K J
	R550	VE-30000721	SMD RES.	1/10W 4.7K J
	R551	VE-30000475	SMD RES.	1/10W 10K J
	R552	VE-30000593	SMD RES.	1/10W 2.2K J
	R554	VE-30000815	CF RES.	1/4W 8.2K J
	R556	VE-30000567	SMD RES.	1/10W 18K J
	R559	VE-30000588	SMD RES.	1/10W 220R J
	R560	VE-30000469	SMD RES.	1/10W 1K J
	R561	VE-30000692	SMD RES.	1/10W 3.9K J
	R562	VE-30000471	CF RES.	1/4W 10K J
	R563	VE-30000471	CF RES.	1/4W 10K J
	R564	VE-30000475	SMD RES.	1/10W 10K J
	R565	VE-30000475	SMD RES.	1/10W 10K J
	R566	VE-30010167	SMD RES.	1/10W 56R J
	R568	VE-30000475	SMD RES.	1/10W 10K J
	R569	VE-30000459	CF RES.	1/4W 100R J
	R570	VE-30000531	CF RES.	1/4W 15K J
	R571	VE-30000466	CF RES.	1/4W 1K J
	R572	VE-30000475	SMD RES.	1/10W 10K J
	R573	VE-30000721	SMD RES.	1/10W 4.7K J
	R574	VE-30000692	SMD RES.	1/10W 3.9K J
	R577	VE-30000475	SMD RES.	1/10W 10K J
	R578	VE-30000475	SMD RES.	1/10W 10K J
	R579	VE-30000721	SMD RES.	1/10W 4.7K J
	R580	VE-30000464	SMD RES.	1/10W 100R J
	R581	VE-30000588	SMD RES.	1/10W 220R J
	R582	VE-30000464	SMD RES.	1/10W 100R J
	R583	VE-30000475	SMD RES.	1/10W 10K J
	R584	VE-30000563	SMD RES.	1/10W 1.8K J
	R586	VE-30000480	SMD RES.	1/10W 100K J
	R587	VE-30000712	CF RES.	1/4W 470R J
	R590	VE-30000721	SMD RES.	1/10W 4.7K J
	R594	VE-30000475	SMD RES.	1/10W 10K J
	R595	VE-30000475	SMD RES.	1/10W 10K J
	R596	VE-30000475	SMD RES.	1/10W 10K J
	R601	VE-30000718	CF RES.	1/4W 4.7K J
	R602	VE-30000464	SMD RES.	1/10W 100R J
	R605	VE-30000466	CF RES.	1/4W 1K J
	R606	VE-30000704	CF RES.	1/4W 43K J
	R608	VE-30001235	FUSE RES.	1/2W 0.33R J
	R610	VE-30001171	MO RES.	2W 4.7K J
⚠	R611	VE-30001215	FUSE RES.	1W 1R J
	R613	VE-30000815	CF RES.	1/4W 8.2K J
	R614	VE-30000775	CF RES.	1/4W 6.8K J
	R615	VE-30000815	CF RES.	1/4W 8.2K J
	R617	VE-30000775	CF RES.	1/4W 6.8K J
	R618	VE-30000464	SMD RES.	1/10W 100R J
	R619	VE-30000815	CF RES.	1/4W 8.2K J
	R620	VE-30001082	MO RES.	1/2W 1K J
	R621	VE-30000459	CF RES.	1/4W 100R J
	R626	VE-30000466	CF RES.	1/4W 1K J
⚠	R628	VE-30001228	FUSE RES.	1/2W 2.2R J
⚠	R629	VE-30001232	FUSE RES.	1/4W 2.7R J
	R630	VE-30001082	MO RES.	1/2W 1K J
	R631	VE-30001171	MO RES.	2W 4.7K J
	R639	VE-30000542	SMD RES.	1/10W 1.5M J
	R700	VE-30000466	CF RES.	1/4W 1K J
	R703	VE-30000860	MF RES.	1/4W 1R F
⚠	R704	VE-30001251	FUSE RES.	1/2W 56R J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R705	VE-30000580	CF RES.	1/4W 22R J
	R706	VE-30000949	MF RES.	1/4W 3K G
	R707	VE-30000712	CF RES.	1/4W 470R J
	R708	VE-30000469	SMD RES.	1/10W 1K J
	R709	VE-30000475	SMD RES.	1/10W 10K J
	R710	VE-30000718	CF RES.	1/4W 4.7K J
	R711	VE-30000500	CF RES.	1/4W 12K J
	R714	VE-30000459	CF RES.	1/4W 100R J
	R715	VE-30000459	CF RES.	1/4W 100R J
	R716	VE-30000466	CF RES.	1/4W 1K J
	R717	VE-30000712	CF RES.	1/4W 470R J
	R805	VE-30000633	CF RES.	1/4W 27K J
	R806	VE-30001129	MO RES.	3W 22K J
	R807	VE-30000466	CF RES.	1/4W 1K J
	R808	VE-30000818	SMD RES.	1/10W 8.2K J
	R809	VE-30000469	SMD RES.	1/10W 1K J
	R810	VE-30000597	SMD RES.	1/10W 22K J
	R811	VE-30000597	SMD RES.	1/10W 22K J
	R812	VE-30000519	CF RES.	1/4W 150R J
	R813	VE-30000475	SMD RES.	1/10W 10K J
	R814	VE-30000706	CF RES.	1/4W 47R J
	R816	VE-30000540	CF RES.	1/2W 1.5M J (400V)
	R818	VE-30000466	CF RES.	1/4W 1K J
	R821	VE-30000602	SMD RES.	1/10W 220K J
	R822	VE-30001156	MO RES.	5W 33K J
	R823	VE-30000513	CF RES.	1/4W 130K J
	R824	VE-30000572	CF RES.	1/4W 2K J
	R828	VE-30007759	CF RES.	1W 47K J
	R829	VE-30000469	SMD RES.	1/10W 1K J
	R831	VE-30000471	CF RES.	1/4W 10K J
	R832	VE-30000721	SMD RES.	1/10W 4.7K J
	R833	VE-30000710	SMD RES.	1/10W 47R J
	R834	VE-30000818	SMD RES.	1/10W 8.2K J
	R835	VE-30000580	CF RES.	1/4W 22R J
	R836	VE-30000706	CF RES.	1/4W 47R J
	R844	VE-30000471	CF RES.	1/4W 10K J
⚠	R845	VE-30001257	MG RES.	1/2W 4.7M J
	R849	VE-30000534	SMD RES.	1/10W 15K J
	R850	VE-30000569	CF RES.	1/4W 180K J
	R858	VE-30000712	CF RES.	1/4W 470R J
	R868	VE-30000810	CF RES.	1/4W 820R J
	R869	VE-30000810	CF RES.	1/4W 820R J
	R870	VE-30001131	MO RES.	1W 0.22R J
	R871	VE-30000471	CF RES.	1/4W 10K J
	R872	VE-30007786	SMD RES.	1/10W 2.55K F
	R873	VE-30012852	SMD RES.	1/10W 3.9K F
	R879	VE-30000718	CF RES.	1/4W 4.7K J
	R885	VE-30000475	SMD RES.	1/10W 10K J
	R886	VE-30000475	SMD RES.	1/10W 10K J
	R888	VE-30000503	SMD RES.	1/10W 12K J
	R890	VE-30001089	MO RES.	2W 1R J
	R891	VE-30000466	CF RES.	1/4W 1K J
	R892	VE-30000531	CF RES.	1/4W 15K J
	R893	VE-30000477	CF RES.	1/4W 100K J
	R894	VE-30000660	CF RES.	1/4W 3.3K J
	R895	VE-30000638	CF RES.	1/4W 270K J
	CAPACITOR			
	C001	VE-30000375	EL CAP.	220UF 16V M
	C01	VE-30000332	SMD CAP.	4.7NF 50V K
	C010	VE-30000294	SMD CAP.	100NF 50V K
	C011	VE-30000294	SMD CAP.	100NF 50V K
	C012	VE-30000294	SMD CAP.	100NF 50V K
	C013	VE-30000375	EL CAP.	220UF 16V M
	C02	VE-30000332	SMD CAP.	4.7NF 50V K
	C028	VE-30000352	EL CAP.	100UF 16V M
	C029	VE-30000294	SMD CAP.	100NF 50V K
	C03	VE-30000332	SMD CAP.	4.7NF 50V K
	C030	VE-30000294	SMD CAP.	100NF 50V K
	C031	VE-30000294	SMD CAP.	100NF 50V K
	C032	VE-30000294	SMD CAP.	100NF 50V K
	C04	VE-30000332	SMD CAP.	4.7NF 50V K
	C051	VE-30000315	SMD CAP.	220NF 25V Z
	C052	VE-30000294	SMD CAP.	100NF 50V K
	C053	VE-30000315	SMD CAP.	220NF 25V Z

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⚠ Symbol No.	Part No.	Part Name	Description
CAPACITOR			
C054	VE-30000315	SMD CAP.	220NF 25V Z
C059	VE-30000300	SMD CAP.	1.5NF 50V K
C060	VE-30000300	SMD CAP.	1.5NF 50V K
C061	VE-30000242	SMD CAP.	330PF 50V J
C062	VE-30000242	SMD CAP.	330PF 50V J
C064	VE-30000300	SMD CAP.	1.5NF 50V K
C065	VE-30000300	SMD CAP.	1.5NF 50V K
C066	VE-30000242	SMD CAP.	330PF 50V J
C067	VE-30000242	SMD CAP.	330PF 50V J
C068	VE-30000345	EL CAP.	10UF 50V M
C071	VE-30000315	SMD CAP.	220NF 25V Z
C072	VE-30000294	SMD CAP.	100NF 50V K
C073	VE-30000294	SMD CAP.	100NF 50V K
C095	VE-30000289	SMD CAP.	10NF 50V K R
C097	VE-30000189	SMD CAP.	100PF 50V J
C098	VE-30000224	SMD CAP.	220PF 50V J
C099	VE-30000189	SMD CAP.	100PF 50V J
C101	VE-30000336	SMD CAP.	5.6NF 50V K
C102	VE-30000345	EL CAP.	10UF 50V M
C107	VE-30000336	SMD CAP.	5.6NF 50V K
C108	VE-30000312	SMD CAP.	22NF 50V K
C109	VE-30000332	SMD CAP.	4.7NF 50V K
C110	VE-30000312	SMD CAP.	22NF 50V K
C111	VE-30000332	SMD CAP.	4.7NF 50V K
C112	VE-30000109	MKT CAP.	470NF 63V J
C113	VE-30000109	MKT CAP.	470NF 63V J
C116	VE-30000082	MKT CAP.	15NF 63V J
C117	VE-30000082	MKT CAP.	15NF 63V J
C201	VE-30000352	EL CAP.	100UF 16V M
C203	VE-30000345	EL CAP.	10UF 50V M
C204	VE-30000345	EL CAP.	10UF 50V M
C211	VE-30000294	SMD CAP.	100NF 50V K
C212	VE-30000190	CER CAP.	100PF 50V J CH
C279	VE-30000263	SMD CAP.	56PF 50V J CH
C301	VE-30000216	SMD CAP.	1.8PF 50V J CH
C302	VE-30000216	SMD CAP.	1.8PF 50V J CH
C304	VE-30000289	SMD CAP.	10NF 50V K R
C306	VE-30000345	EL CAP.	10UF 50V M
C307	VE-30000294	SMD CAP.	100NF 50V K
C308	VE-30000074	MKT CAP.	100NF 63V J
C309	VE-30000345	EL CAP.	10UF 50V M
C316	VE-30000284	SMD CAP.	1NF 50V K R
C317	VE-30000284	SMD CAP.	1NF 50V K R
C318	VE-30000074	MKT CAP.	100NF 63V J
C319	VE-30000393	EL CAP.	3.3UF 50V M
C320	VE-30000294	SMD CAP.	100NF 50V K
C321	VE-30000345	EL CAP.	10UF 50V M
C322	VE-30000345	EL CAP.	10UF 50V M
C323	VE-30000345	EL CAP.	10UF 50V M
C326	VE-30000371	EL CAP.	22UF 50V M
C327	VE-30000371	EL CAP.	22UF 50V M
C328	VE-30000284	SMD CAP.	1NF 50V K R
C329	VE-30000284	SMD CAP.	1NF 50V K R
C330	VE-30000284	SMD CAP.	1NF 50V K R
C331	VE-30000284	SMD CAP.	1NF 50V K R
C332	VE-30000417	EL CAP.	6.8UF 50V M
C333	VE-30000294	SMD CAP.	100NF 50V K
C334	VE-30000345	EL CAP.	10UF 50V M
C335	VE-30000252	SMD CAP.	47PF 50V J
C336	VE-30000252	SMD CAP.	47PF 50V J
C338	VE-30000371	EL CAP.	22UF 50V M
C339	VE-30000256	SMD CAP.	470PF 50V J
C340	VE-30000100	MKT CAP.	330NF 63V J
C341	VE-30000256	SMD CAP.	470PF 50V J
C342	VE-30000100	MKT CAP.	330NF 63V J
C343	VE-30000224	SMD CAP.	220PF 50V J
C344	VE-30000100	MKT CAP.	330NF 63V J
C346	VE-30000224	SMD CAP.	220PF 50V J
C347	VE-30000371	EL CAP.	22UF 50V M
C348	VE-30000224	SMD CAP.	220PF 50V J
C349	VE-30000100	MKT CAP.	330NF 63V J
C350	VE-30000224	SMD CAP.	220PF 50V J
C351	VE-30000100	MKT CAP.	330NF 63V J
C352	VE-30000224	SMD CAP.	220PF 50V J
C353	VE-30000100	MKT CAP.	330NF 63V J
C355	VE-30000284	SMD CAP.	1NF 50V K R

⚠ Symbol No.	Part No.	Part Name	Description
CAPACITOR			
C357	VE-30000294	SMD CAP.	100NF 50V K
C358	VE-30000100	MKT CAP.	330NF 63V J
C364	VE-30000284	SMD CAP.	1NF 50V K R
C365	VE-30000384	EL CAP.	2.2UF 50V M
C366	VE-30000294	SMD CAP.	100NF 50V K
C367	VE-30000294	SMD CAP.	100NF 50V K
C368	VE-30000294	SMD CAP.	100NF 50V K
C369	VE-30000294	SMD CAP.	100NF 50V K
C370	VE-30000384	EL CAP.	2.2UF 50V M
C371	VE-30000109	MKT CAP.	470NF 63V J
C373	VE-30000371	EL CAP.	22UF 50V M
C374	VE-30000294	SMD CAP.	100NF 50V K
C375	VE-30000362	EL CAP.	1UF 50V M
C376	VE-30000332	SMD CAP.	4.7NF 50V K
C377	VE-30000294	SMD CAP.	100NF 50V K
C378	VE-30000345	EL CAP.	10UF 50V M
C379	VE-30000294	SMD CAP.	100NF 50V K
C385	VE-30000294	SMD CAP.	100NF 50V K
C400	VE-30000294	SMD CAP.	100NF 50V K
C401	VE-30000371	EL CAP.	22UF 50V M
C402	VE-30000345	EL CAP.	10UF 50V M
C402	VE-30000387	EL CAP.	33UF 50V M
C403	VE-30000074	MKT CAP.	100NF 63V J
C403	VE-30000294	SMD CAP.	100NF 50V K
C404	VE-30000284	SMD CAP.	1NF 50V K R
C405	VE-30000345	EL CAP.	10UF 50V M
C405	VE-30000294	SMD CAP.	100NF 50V K
C406	VE-30000313	CER CAP.	22NF 50V Z F
C406	VE-30000284	SMD CAP.	1NF 50V K R
C407	VE-30000384	EL CAP.	2.2UF 50V M
C407	VE-30000284	SMD CAP.	1NF 50V K R
C408	VE-30000283	CER CAP.	1NF 50V K B
C409	VE-30000334	SMD CAP.	47NF 50V K
C410	VE-30000345	EL CAP.	10UF 50V M
C411	VE-30000334	SMD CAP.	47NF 50V K
C412	VE-30000312	SMD CAP.	22NF 50V K
C413	VE-30000375	EL CAP.	220UF 16V M
C415	VE-30000092	MKT CAP.	220NF 63V J
C416	VE-30000312	SMD CAP.	22NF 50V K
C417	VE-30000312	SMD CAP.	22NF 50V K
C418	VE-30000312	SMD CAP.	22NF 50V K
C419	VE-30000315	SMD CAP.	220NF 25V Z
C421	VE-30000220	SMD CAP.	22PF 50V J
C422	VE-30000220	SMD CAP.	22PF 50V J
C423	VE-30000322	SMD CAP.	3.3NF 50V K
C424	VE-30000294	SMD CAP.	100NF 50V K
C425	VE-30000312	SMD CAP.	22NF 50V K
C426	VE-30000353	EL CAP.	100UF 25V M
C427	VE-30000294	SMD CAP.	100NF 50V K
C428	VE-30000345	EL CAP.	10UF 50V M
C430	VE-30000289	SMD CAP.	10NF 50V K R
C431	VE-30000362	EL CAP.	1UF 50V M
C433	VE-30000284	SMD CAP.	1NF 50V K R
C434	VE-30000284	SMD CAP.	1NF 50V K R
C435	VE-30000074	MKT CAP.	100NF 63V J
C436	VE-30000074	MKT CAP.	100NF 63V J
C437	VE-30000362	EL CAP.	1UF 50V M
C438	VE-30000312	SMD CAP.	22NF 50V K
C439	VE-30000284	SMD CAP.	1NF 50V K R
C440	VE-30000345	EL CAP.	10UF 50V M
C446	VE-30000252	SMD CAP.	47PF 50V J
C447	VE-30000252	SMD CAP.	47PF 50V J
C448	VE-30000189	SMD CAP.	100PF 50V J
C450	VE-30000294	SMD CAP.	100NF 50V K
C459	VE-30000332	SMD CAP.	4.7NF 50V K
C465	VE-30000300	SMD CAP.	1.5NF 50V K
C490	VE-30000284	SMD CAP.	1NF 50V K R
C497	VE-30000300	SMD CAP.	1.5NF 50V K
C498	VE-30000189	SMD CAP.	100PF 50V J
C499	VE-30000300	SMD CAP.	1.5NF 50V K
C505	VE-30000294	SMD CAP.	100NF 50V K
C513	VE-30000294	SMD CAP.	100NF 50V K
C514	VE-30000345	EL CAP.	10UF 50V M
C516	VE-30000371	EL CAP.	22UF 50V M
C517	VE-30000352	EL CAP.	100UF 16V M
C521	VE-30000109	MKT CAP.	470NF 63V J

[AV28BT7EPS / AV28BT7EPB]

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C524	VE-30000237	SMD CAP.	33PF 50V J
	C525	VE-30000237	SMD CAP.	33PF 50V J
	C526	VE-30000294	SMD CAP.	100NF 50V K
	C530	VE-30000294	SMD CAP.	100NF 50V K
	C531	VE-30000294	SMD CAP.	100NF 50V K
	C532	VE-30000294	SMD CAP.	100NF 50V K
	C533	VE-30000294	SMD CAP.	100NF 50V K
	C537	VE-30000294	SMD CAP.	100NF 50V K
	C538	VE-30000294	SMD CAP.	100NF 50V K
	C539	VE-30000294	SMD CAP.	100NF 50V K
	C540	VE-30000294	SMD CAP.	100NF 50V K
	C570	VE-30000371	EL CAP.	22UF 50V M
	C571	VE-30000371	EL CAP.	22UF 50V M
	C572	VE-30000371	EL CAP.	22UF 50V M
	C573	VE-30000371	EL CAP.	22UF 50V M
	C576	VE-30000201	SMD CAP.	15PF 50V J
	C577	VE-30000201	SMD CAP.	15PF 50V J
	C580	VE-30000387	EL CAP.	33UF 50V M
	C583	VE-30000294	SMD CAP.	100NF 50V K
	C590	VE-30000294	SMD CAP.	100NF 50V K
	C596	VE-30000289	SMD CAP.	10NF 50V K R
	C597	VE-30000289	SMD CAP.	10NF 50V K R
	C598	VE-30000289	SMD CAP.	10NF 50V K R
	C599	VE-30000334	SMD CAP.	47NF 50V K
	C600	VE-30000289	SMD CAP.	10NF 50V K R
	C601	VE-30000355	EL CAP.	100UF 50V M
	C603	VE-30000309	SMD CAP.	2.2NF 50V K R
	C604	VE-30000107	MKT CAP.	47NF 250V J
	C605	VE-30000075	MKT CAP.	100NF 250V K (DC)
	C606	VE-30000406	EL CAP.	47UF 250V M (HR)
	C607	VE-30000407	EL CAP.	470UF 16V M
	C608	VE-30009206	SMD CAP.	15NF 50V K R
	C610	VE-30000123	PP CAP.	33NF 630V K
	C611	VE-30000143	MKP CAP.	2.2NF 2KV %3.5
	C612	VE-30000356	EL CAP.	100UF 63V M
	C613	VE-30000121	KP CAP.	27NF 630V J
	C617	VE-30000172	MKP CAP.	680NF 250V J (P=15)
	C618	VE-30000078	MKT CAP.	1UF 100V M
	C620	VE-30000433	CER CAP.	1NF 1KV M B
	C621	VE-30000078	MKT CAP.	1UF 100V M
	C625	VE-30000315	SMD CAP.	220NF 25V Z
	C626	VE-30000180	MKP CAP.	9.1NF 2000V %3.5
	C627	VE-30000340	SMD CAP.	6.8NF 50V K
	C630	VE-30000156	MKP CAP.	430NF 250V J
	C632	VE-30016086	EL CAP.	1000UF 25V 105°
	C650	VE-30000280	SMD CAP.	820PF 50V J
	C660	VE-30009208	CER CAP.	470PF 1KV K (PULSE)
	C661	VE-30009208	CER CAP.	470PF 1KV K (PULSE)
	C700	VE-30000190	CER CAP.	100PF 50V J CH
	C702	VE-30000356	EL CAP.	100UF 63V M
	C704	VE-30016085	EL CAP.	10UF 63V 105°
	C705	VE-30000071	MKT CAP.	10NF 63V J
	C706	VE-30000092	MKT CAP.	220NF 63V J
	C707	VE-30000069	MKT CAP.	1NF 100V J
	C708	VE-30000189	SMD CAP.	100PF 50V J
	C709	VE-30000294	SMD CAP.	100NF 50V K
	C715	VE-30000189	SMD CAP.	100PF 50V J
⚠	C801	VE-30000084	MKT CAP.	150NF 275V M AC P=15
⚠	C802	VE-30000084	MKT CAP.	150NF 275V M AC P=15
	C803	VE-30000189	SMD CAP.	100PF 50V J
	C804	VE-30000421	EL CAP.	220UF 400V M (FOR 28'')
	C806	VE-30000342	CER CAP.	820PF 50V K B
	C807	VE-30000074	MKT CAP.	100NF 63V J
	C808	VE-30000284	SMD CAP.	1NF 50V K R
	C809	VE-30000309	SMD CAP.	2.2NF 50V K R
	C810	VE-30000076	MKT CAP.	100NF 275V M AC
	C811	VE-30000161	MKP CAP.	47NF 630V J
	C813	VE-30000411	EL CAP.	4700UF 16V M
	C814	VE-30000294	SMD CAP.	100NF 50V K
	C817	VE-30000359	EL CAP.	1000UF 16V M
	C819	VE-30000295	CER CAP.	100NF 50V Z F
	C821	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C822	VE-30000295	CER CAP.	100NF 50V Z F
	C823	VE-30000383	EL CAP.	2200UF 25V M
	C824	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C825	VE-30000295	CER CAP.	100NF 50V Z F

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C826	VE-30000383	EL CAP.	2200UF 25V M
	C827	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C828	VE-30000359	EL CAP.	1000UF 16V M
	C829	VE-30000406	EL CAP.	47UF 250V M (HR)
	C830	VE-30000295	CER CAP.	100NF 50V Z F
	C831	VE-30000198	CER CAP.	120PF 500V J SL
	C832	VE-30000294	SMD CAP.	100NF 50V K
	C835	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
	C845	VE-30000375	EL CAP.	220UF 16V M
	C846	VE-30000433	CER CAP.	1NF 1KV M B
	C847	VE-30000375	EL CAP.	220UF 16V M
	C848	VE-30000353	EL CAP.	100UF 25V M
	C850	VE-30000433	CER CAP.	1NF 1KV M B
	C851	VE-30000433	CER CAP.	1NF 1KV M B
	C852	VE-30000433	CER CAP.	1NF 1KV M B
	C853	VE-30000289	SMD CAP.	10NF 50V K R
	C854	VE-30008805	MKT CAP.	39NF 63V J
	C855	VE-30000284	SMD CAP.	1NF 50V K R
	C860	VE-30000440	CER CAP.	2.2NF 4KV M
	C865	VE-30000440	CER CAP.	2.2NF 4KV M
	C890	VE-30000396	EL CAP.	47UF 16V M
	C891	VE-30000335	CER CAP.	47NF 50V Z F
	C892	VE-30000295	CER CAP.	100NF 50V Z F
	COIL			
	L001	VE-30002016	FIXED COIL	150UH Q60 K
	L002	VE-30010964	FERRITE BEAT	
	L050	VE-30002015	FIXED COIL	150UH Q50 K (RAD)
	L051	VE-30002015	FIXED COIL	150UH Q50 K (RAD)
	L054	VE-30010964	FERRITE BEAT	
	L201	VE-30001979	FIXED COIL	1UH Q45 M-A
	L202	VE-30010964	FERRITE BEAT	
	L301	VE-30001987	FIXED COIL	4.7UH Q70 K-A
	L302	VE-30001987	FIXED COIL	4.7UH Q70 K-A
	L303	VE-30001987	FIXED COIL	4.7UH Q70 K-A
	L304	VE-30001986	FIXED COIL	3.3UH Q65 K
	L305	VE-30001979	FIXED COIL	1UH Q45 M-A
	L306	VE-30002002	FIXED COIL	47UH Q60 K
	L307	VE-30002002	FIXED COIL	47UH Q60 K
	L308	VE-30002002	FIXED COIL	47UH Q60 K
	L309	VE-30002002	FIXED COIL	47UH Q60 K
	L402	VE-30001986	FIXED COIL	3.3UH Q65 K
	L403	VE-30001990	FIXED COIL	6.8UH Q75 K
	L405	VE-30001992	FIXED COIL	10UH Q65 K-A
	L406	VE-30001992	FIXED COIL	10UH Q65 K-A
	L407	VE-30001992	FIXED COIL	10UH Q65 K-A
	L502	VE-30001992	FIXED COIL	10UH Q65 K-A
	L504	VE-30001992	FIXED COIL	10UH Q65 K-A
	L505	VE-30001992	FIXED COIL	10UH Q65 K-A
	L506	VE-30001992	FIXED COIL	10UH Q65 K-A
	L515	VE-30001992	FIXED COIL	10UH Q65 K-A
	L602	VE-30002026	FIXED COIL	1MH AK19 25/28
	L603	VE-30002156	LINEARITY COIL	30UH 110' (AK19)
	L604	VE-30002031	FIXED COIL	INJECTION 15MH
	L605	VE-30001999	FIXED COIL	40UH (LOSS COIL)
	L801	VE-30001984	FIXED COIL	2.2UH Q55 M-AX
	L803	VE-30002011	CHOKE COIL	150UH 0.82A RAD
	DIODE			
	D001	VE-30001284	DIODE	
	D002	VE-30001284	DIODE	
	D003	VE-30001284	DIODE	
	D004	VE-30001284	DIODE	
	D100	VE-30001284	DIODE	
	D201	VE-30001284	DIODE	
	D301	VE-30001369	ZENER DIODE	
	D302	VE-30001284	DIODE	
	D303	VE-30001283	DIODE	
	D304	VE-30001283	DIODE	
	D408	VE-30001347	ZENER DIODE	
	D420	VE-30001285	DIODE	
	D500	VE-30012412	ZENER DIODE	
	D503	VE-30001284	DIODE	
	D504	VE-30001284	DIODE	

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DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D505	VE-30012412	ZENER DIODE	
	D509	VE-30001284	DIODE	
	D555	VE-30001285	DIODE	
	D583	VE-30001284	DIODE	
	D601	VE-30001318	DIODE	
	D602	VE-30001285	DIODE	
	D603	VE-30001284	DIODE	
	D604	VE-30001377	ZENER DIODE	
	D605	VE-30001318	DIODE	
	D606	VE-30001318	DIODE	
	D607	VE-30001285	DIODE	
	D608	VE-30001284	DIODE	
	D609	VE-30001318	DIODE	
	D611	VE-30001323	DIODE	
	D612	VE-30001320	DIODE	
	D698	VE-30001318	DIODE	
	D701	VE-30001284	DIODE	
	D801	VE-30001329	DIODE	
	D802	VE-30001329	DIODE	
	D803	VE-30001329	DIODE	
	D804	VE-30001329	DIODE	
	D805	VE-30001318	DIODE	
	D807	VE-30001318	DIODE	
	D811	VE-30001315	DIODE	
	D812	VE-30001315	DIODE	
	D813	VE-30001288	DIODE	
	D814	VE-30001307	DIODE	
	D815	VE-30001307	DIODE	
	D816	VE-30007681	DIODE	
	D818	VE-30001318	DIODE	
	D819	VE-30001349	ZENER DIODE	
	D823	VE-30001284	DIODE	
	D826	VE-30001318	DIODE	
	D827	VE-30001318	DIODE	
	D858	VE-30001371	ZENER DIODE	
	D864	VE-30001285	DIODE	
	D890	VE-30001284	DIODE	

TRANSISTOR

Q001	VE-30001455	TR	
Q055	VE-30001454	TR	
Q1	VE-30003729	TR	
Q100	VE-30001454	TR	
Q301	VE-30001455	TR	
Q303	VE-30001454	TR	
Q304	VE-30001454	TR	
Q307	VE-30001454	TR	
Q402	VE-30001454	TR	
Q406	VE-30001454	TR	
Q415	VE-30001454	TR	
Q420	VE-30001454	TR	
Q503	VE-30001455	TR	
Q512	VE-30001455	TR	
Q514	VE-30001454	TR	
Q515	VE-30001454	TR	
Q516	VE-30001454	TR	
Q517	VE-30001454	TR	
Q518	VE-30001454	TR	
Q521	VE-30001454	TR	
Q522	VE-30001454	TR	
Q601	VE-30001455	TR	
Q603	VE-20000963	HE.ASY.	
Q604	VE-30001435	TR	
Q605	VE-30001441	TR	
Q701	VE-30001455	TR	
Q702	VE-30001454	TR	
Q802	VE-20073672	HE.ASY.	
Q805	VE-30001454	TR	
Q806	VE-30001454	TR	
Q807	VE-30001454	TR	
Q809	VE-30001506	IC	
Q810	VE-30001384	TR	
Q890	VE-30001428	TR	

IC

⚠	Symbol No.	Part No.	Part Name	Description
	IC050	VE-30001619	IC	
	IC301	VE-30001664	IC	
	IC307	VE-30001494	IC	
	IC401	VE-30001579	IC	
	IC501	VE-20075294	PR.IC	(MYCOM)
	IC502	VE-20081472	IC	(MEMORY)
	IC701	VE-30002736	IC	
⚠	IC801	VE-30007069	IC	
	IC802	VE-30001499	IC	
	IC804	VE-20058533	HE.ASY.	
	IC805	VE-30001500	IC	
	IC807	VE-30001622	IC	

OTHER

⚠	Symbol No.	Part No.	Part Name	Description
⚠	F801	VE-20000848	FUSE ASSY	
	J129	VE-30001997	FIXED COIL	33UH Q60 J
	J314	VE-20058569	MD.ASY.	
	J500	VE-30010964	FERRITE BEAT	
	J616	VE-30006712	FERRITE BEAD	3.5X4.7X0.8
	PL002	VE-30001912	PIN F	5P/2.5MM (11.5MM)
	PL892	VE-30007118	PIN F	2P/7.5MM
	PL893	VE-30007118	PIN F	2P/7.5MM
	TH801	VE-30001268	THERMISTOR	
	TR601	VE-30002090	LINE DRIVER	
⚠	TR602	VE-30002054	TRF FBT	
⚠	TR801	VE-30002103	LINE FILTER	
⚠	TR802	VE-30002080	TRF SMPS	
	TU201	VE-30009637	TUNER WSP (PLL)	
	VL301	VE-30002036	ADJ COIL	
	VR301	VE-30001069	ADJ RES.	0.15W 47K VER (MAN)
	VR801	VE-30001064	ADJ RES.	47OR 0.1W VER (MAN)
	X301	VE-30001756	XTAL	
	X401	VE-30001748	XTAL	
	X404	VE-30001745	XTAL	
	X501	VE-30006662	XTAL	
	Z209	VE-30001724	FILTER SER TRAP	
	Z301	VE-30001708	SAW FILTER	
	Z302	VE-30001692	SAW FILTER	
	Z401	VE-30001692	SAW FILTER	

[AV28BT7EPS / AV28BT7EPB]

MULTI SOUND P.W. BOARD ASS'Y (VE-20079020)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R001	VE-30000631	SMD RES.	1/10W 2.7K J
	R002	VE-30000631	SMD RES.	1/10W 2.7K J
	R303	VE-30000469	SMD RES.	1/10W 1K J
	R304	VE-30000717	SMD RES.	1/10W 470R J
	R305	VE-30000717	SMD RES.	1/10W 470R J
	R306	VE-30000464	SMD RES.	1/10W 100R J
	R307	VE-30000464	SMD RES.	1/10W 100R J
	R308	VE-30000464	SMD RES.	1/10W 100R J
	R309	VE-30000660	CF RES.	1/4W 3.3K J
	R310	VE-30000660	CF RES.	1/4W 3.3K J
	R311	VE-30000531	CF RES.	1/4W 15K J
	R313	VE-30000534	SMD RES.	1/10W 15K J
	R314	VE-30000534	SMD RES.	1/10W 15K J
	R315	VE-30000534	SMD RES.	1/10W 15K J
	R316	VE-30000469	SMD RES.	1/10W 1K J
	R319	VE-30000469	SMD RES.	1/10W 1K J
	R321	VE-30000664	SMD RES.	1/10W 3.3K J
	R331	VE-30000668	SMD RES.	1/10W 33K J
	R332	VE-30000475	SMD RES.	1/10W 10K J
	R333	VE-30000668	SMD RES.	1/10W 33K J
	R334	VE-30000480	SMD RES.	1/10W 100K J
	R340	VE-30000727	SMD RES.	1/10W 47K J
	R341	VE-30000524	SMD RES.	1/10W 150R J
⚠	R343	VE-30001248	FUSE RES.	1/4W 4.7R J
	R344	VE-30000766	SMD RES.	1/10W 620K J
	R345	VE-30000499	SMD RES.	1/10W 1.2K J
	R346	VE-30000835	SMD RES.	1/10W 910R J
	R347	VE-30000563	SMD RES.	1/10W 1.8K J
	R359	VE-30000464	SMD RES.	1/10W 100R J
	R360	VE-30000464	SMD RES.	1/10W 100R J
	R361	VE-30000464	SMD RES.	1/10W 100R J
	R364	VE-30000464	SMD RES.	1/10W 100R J
	R378	VE-30000471	CF RES.	1/4W 10K J
	R379	VE-30000475	SMD RES.	1/10W 10K J
	R399	VE-30000717	SMD RES.	1/10W 470R J
	CAPACITOR			
	C279	VE-30000263	SMD CAP.	56PF 50V J CH
	C301	VE-30000216	SMD CAP.	1.8PF 50V J CH
	C302	VE-30000216	SMD CAP.	1.8PF 50V J CH
	C304	VE-30000289	SMD CAP.	10NF 50V K R
	C306	VE-30000345	EL CAP .	10UF 50V M
	C307	VE-30000294	SMD CAP.	100NF 50V K
	C308	VE-30000074	MKT CAP.	100NF 63V J
	C309	VE-30000345	EL CAP .	10UF 50V M
	C316	VE-30000284	SMD CAP.	1NF 50V K R
	C317	VE-30000284	SMD CAP.	1NF 50V K R
	C318	VE-30000074	MKT CAP.	100NF 63V J
	C319	VE-30000393	EL CAP .	3.3UF 50V M
	C320	VE-30000294	SMD CAP.	100NF 50V K
	C321	VE-30000345	EL CAP .	10UF 50V M
	C322	VE-30000345	EL CAP .	10UF 50V M
	C323	VE-30000345	EL CAP .	10UF 50V M
	C326	VE-30000371	EL CAP .	22UF 50V M
	C327	VE-30000371	EL CAP .	22UF 50V M
	C328	VE-30000284	SMD CAP.	1NF 50V K R
	C329	VE-30000284	SMD CAP.	1NF 50V K R
	C330	VE-30000284	SMD CAP.	1NF 50V K R
	C331	VE-30000284	SMD CAP.	1NF 50V K R
	C332	VE-30000417	EL CAP .	6.8UF 50V M
	C333	VE-30000294	SMD CAP.	100NF 50V K
	C334	VE-30000345	EL CAP .	10UF 50V M
	C335	VE-30000252	SMD CAP.	47PF 50V J
	C336	VE-30000252	SMD CAP.	47PF 50V J
	C338	VE-30000371	EL CAP .	22UF 50V M
	C339	VE-30000256	SMD CAP.	470PF 50V J
	C340	VE-30000100	MKT CAP.	330NF 63V J
	C341	VE-30000256	SMD CAP.	470PF 50V J
	C342	VE-30000100	MKT CAP.	330NF 63V J
	C343	VE-30000224	SMD CAP.	220PF 50V J
	C344	VE-30000100	MKT CAP.	330NF 63V J
	C346	VE-30000224	SMD CAP.	220PF 50V J
	C347	VE-30000371	EL CAP .	22UF 50V M
	C348	VE-30000224	SMD CAP.	220PF 50V J

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C349	VE-30000100	MKT CAP.	330NF 63V J
	C350	VE-30000224	SMD CAP.	220PF 50V J
	C351	VE-30000100	MKT CAP.	330NF 63V J
	C352	VE-30000224	SMD CAP.	220PF 50V J
	C353	VE-30000100	MKT CAP.	330NF 63V J
	C355	VE-30000284	SMD CAP.	1NF 50V K R
	C357	VE-30000294	SMD CAP.	100NF 50V K
	C358	VE-30000100	MKT CAP.	330NF 63V J
	C364	VE-30000284	SMD CAP.	1NF 50V K R
	C365	VE-30000384	EL CAP .	2.2UF 50V M
	C366	VE-30000294	SMD CAP.	100NF 50V K
	C367	VE-30000294	SMD CAP.	100NF 50V K
	C368	VE-30000294	SMD CAP.	100NF 50V K
	C369	VE-30000294	SMD CAP.	100NF 50V K
	C370	VE-30000384	EL CAP .	2.2UF 50V M
	C371	VE-30000109	MKT CAP.	470NF 63V J
	C373	VE-30000371	EL CAP .	22UF 50V M
	C374	VE-30000294	SMD CAP.	100NF 50V K
	C375	VE-30000362	EL CAP .	1UF 50V M
	C376	VE-30000332	SMD CAP.	4.7NF 50V K
	C377	VE-30000294	SMD CAP.	100NF 50V K
	C378	VE-30000345	EL CAP .	10UF 50V M
	C379	VE-30000294	SMD CAP.	100NF 50V K
	C385	VE-30000294	SMD CAP.	100NF 50V K
	C400	VE-30000294	SMD CAP.	100NF 50V K
	C401	VE-30000371	EL CAP .	22UF 50V M
	C402	VE-30000387	EL CAP .	33UF 50V M
	C403	VE-30000294	SMD CAP.	100NF 50V K
	C404	VE-30000284	SMD CAP.	1NF 50V K R
	C405	VE-30000294	SMD CAP.	100NF 50V K
	C406	VE-30000284	SMD CAP.	1NF 50V K R
	C407	VE-30000284	SMD CAP.	1NF 50V K R
	COIL			
	L301	VE-30001987	FIXED COIL	4.7UH Q70 K-A
	L302	VE-30001987	FIXED COIL	4.7UH Q70 K-A
	L303	VE-30001987	FIXED COIL	4.7UH Q70 K-A
	L304	VE-30001986	FIXED COIL	3.3UH Q65 K
	L305	VE-30001979	FIXED COIL	1UH Q45 M-A
	L306	VE-30002002	FIXED COIL	47UH Q60 K
	L307	VE-30002002	FIXED COIL	47UH Q60 K
	L308	VE-30002002	FIXED COIL	47UH Q60 K
	L309	VE-30002002	FIXED COIL	47UH Q60 K
	DIODE			
	D301	VE-30001369	DIODE ZENER	
	D302	VE-30001284	DIODE	
	D303	VE-30001283	DIODE	
	D304	VE-30001283	DIODE	
	TRANSISTOR			
	Q301	VE-30001455	TR BC558B	
	Q303	VE-30001454	TR BC548B	
	Q304	VE-30001454	TR BC548B	
	Q307	VE-30001454	TR BC548B	
	IC			
	IC301	VE-30001664	IC	
	IC307	VE-30001494	IC	
	OTHERS			
	VL301	VE-30002036	ADJ COIL	
	VR301	VE-30001069	ADJ RES.	0.15W 47K VER (MAN)
	X301	VE-30001756	XTAL	
	Z301	VE-30001708	FILTER SAW	
	Z302	VE-30001692	FILTER SAW	

[AV28BT7EPS / AV28BT7EPB]

CRT SOCKET P.W. BOARD ASS'Y (VE-20074437)

Refer to PARTS LIST in page 25 for this P.W. board.

FRONT CONTROL P.W. BOARD ASS'Y (VE-20001612)

Refer to PARTS LIST in page 25 for this P.W. board.

FRONT AV + HEADPHONE JACK P.W. BOARD ASS'Y (VE-20083646)

Refer to PARTS LIST in page 25 for this P.W. board.

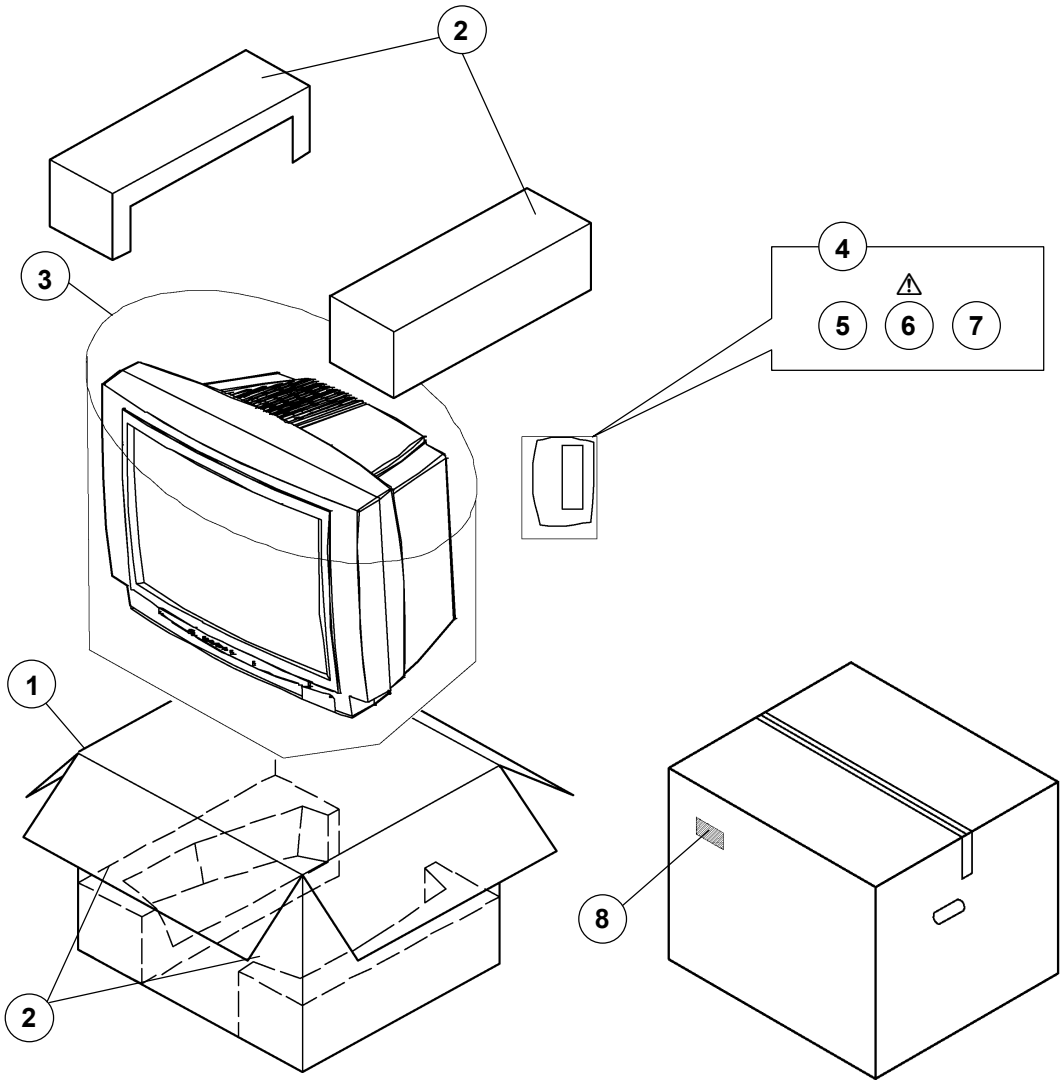
PROTECTION MODULE P.W. BOARD ASS'Y (VE-20058569)

Refer to PARTS LIST in page 25 for this P.W. board.

T(SPOT KILLER) MODULE P.W. BOARD ASS'Y (VE-20019598)

Refer to PARTS LIST in page 25 for this P.W. board.

PACKING



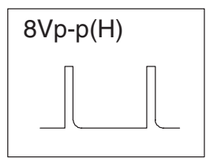
PACKING PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description
	1	VE-20083462	F CARTON BOX	(AV28BT7ENS)
	1	VE-20083400	F CARTON BOX	(AV28BT7ENB)
	1	VE-20083464	F CARTON BOX	(AV28BT7EES)
	1	VE-20083469	F CARTON BOX	(AV28BT7EEB)
	1	VE-20083471	F CARTON BOX	(AV28BT7EPS)
	1	VE-20083484	F CARTON BOX	(AV28BT7EPB)
	2	VE-20004267 / 68	CUSHION ASS'Y 72	
	3	VE-50020732	POLY BAG (1400*1000)	
	4	VE-70000010	POLY BAG	
	5	RM-C85	REMOTE CONTROL UNIT	
⚠	6	VE-50021021	INST BOOK	(AV28BT7ENS/ENB)
⚠	6	VE-50021020	INST BOOK	(AV28BT7EES/EEB)
⚠	6	VE-50021022	INST BOOK	(AV28BT7EPS/EPB)
	7	BT-54013-2TK	WARRANTY CARD	
	8	VE-20083403	LABEL	(AV28BT7ENS)
	8	VE-20083401	LABEL	(AV28BT7ENB)
	8	VE-20083465	LABEL	(AV28BT7EES)
	8	VE-20083467	LABEL	(AV28BT7EEB)
	8	VE-20083482	LABEL	(AV28BT7EPS)
	8	VE-20083485	LABEL	(AV28BT7EPB)

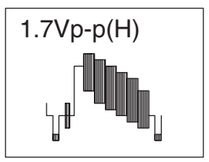
WAVEFORM DIAGRAMS

■ MAIN PWB

Q802 D



IC401 6pin



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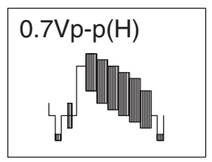
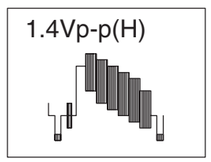


IC050 17pin



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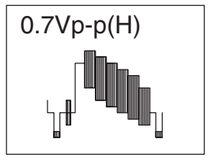

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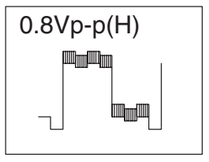
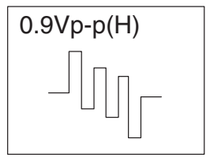
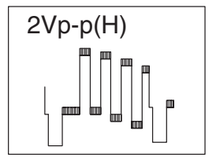


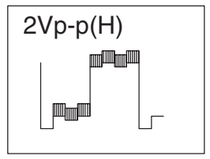
IC401 29pin



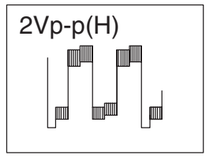
IC401 19pin



IC401 20pin



IC401 21pin



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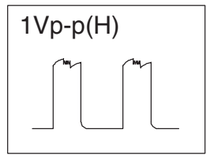
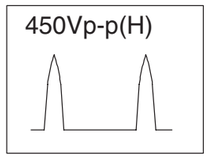
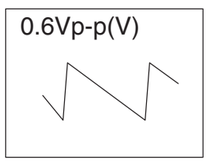


Q605 C



IC401 47pin



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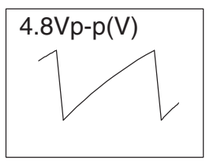
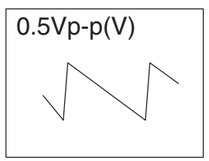
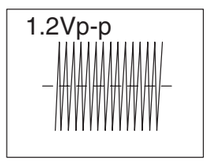


IC701 9pin

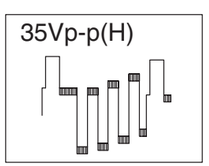


IC501 34pin

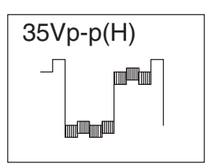


■ CRT SOCKET PWB

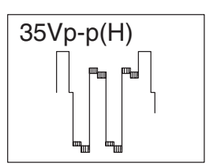
IC901 7pin



IC901 8pin



IC901 9pin



AV28BT7ENS / AV28BT7ENB
AV28BT7EES / AV28BT7EEB
AV28BT7EPS / AV28BT7EPB

AV28BT7ENS / AV28BT7ENB
AV28BT7EES / AV28BT7EEB
AV28BT7EPS / AV28BT7EPB

STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the ⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal	: Colour bar signal
(2)Setting positions of each knob/button and variable resistor	: Original setting position when shipped
(3)Internal resistance of tester	:DC 20kΩ/V
(4)Oscilloscope sweeping time	:H ⇒ 20μS/div :V ⇒ 5mS/div :Others ⇒ Sweeping time is specified
(5)Voltage values	:All DC voltage values

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

No unit	:[Ω]
K	:[K Ω]
M	:[M Ω]

● Type

No indication	:Carbon resistor
OMR	:Oxide metal film resistor
MFR	:Metal film resistor
MPR	:Metal plate resistor
UNFR	:Uninflammable resistor
FR	:Fusible resistor

∗ Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

● Capacitance value

1 or higher	:[pF]
less than 1	:[μF]

● Withstand voltage

No indication	:DC50[V]
Others	:DC withstand voltage [V]
AC indicated	:AC withstand voltage [V]

∗ Electrolytic Capacitors
47/50[Example]:Capacitance value [μF]/withstand voltage[V]

● Type

No indication	:Ceramic capacitor
MM	:Metalized mylar capacitor
PP	:Polypropylene capacitor
MPP	:Metalized polypropylene capacitor
MF	:Metalized film capacitor
TF	:Thin film capacitor
BP	:Bipolar electrolytic capacitor
TAN	:Tantalum capacitor

(3)Coils

No unit	:[μH]
Others	:As specified

4.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE side GND and the ISOLATED(NEUTRAL) side GND.Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

◇ **Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

NOTE

◇ **Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.**
When ordering parts, please use the numbers that appear in the Parts List.

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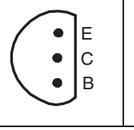
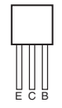
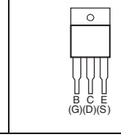
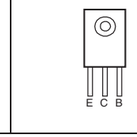
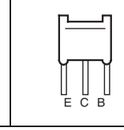
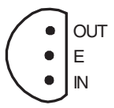
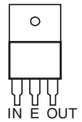
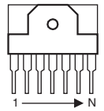
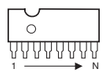
SEMICONDUCTOR SHAPES

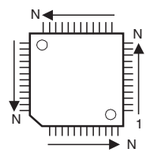
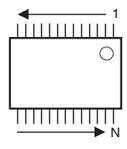
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR

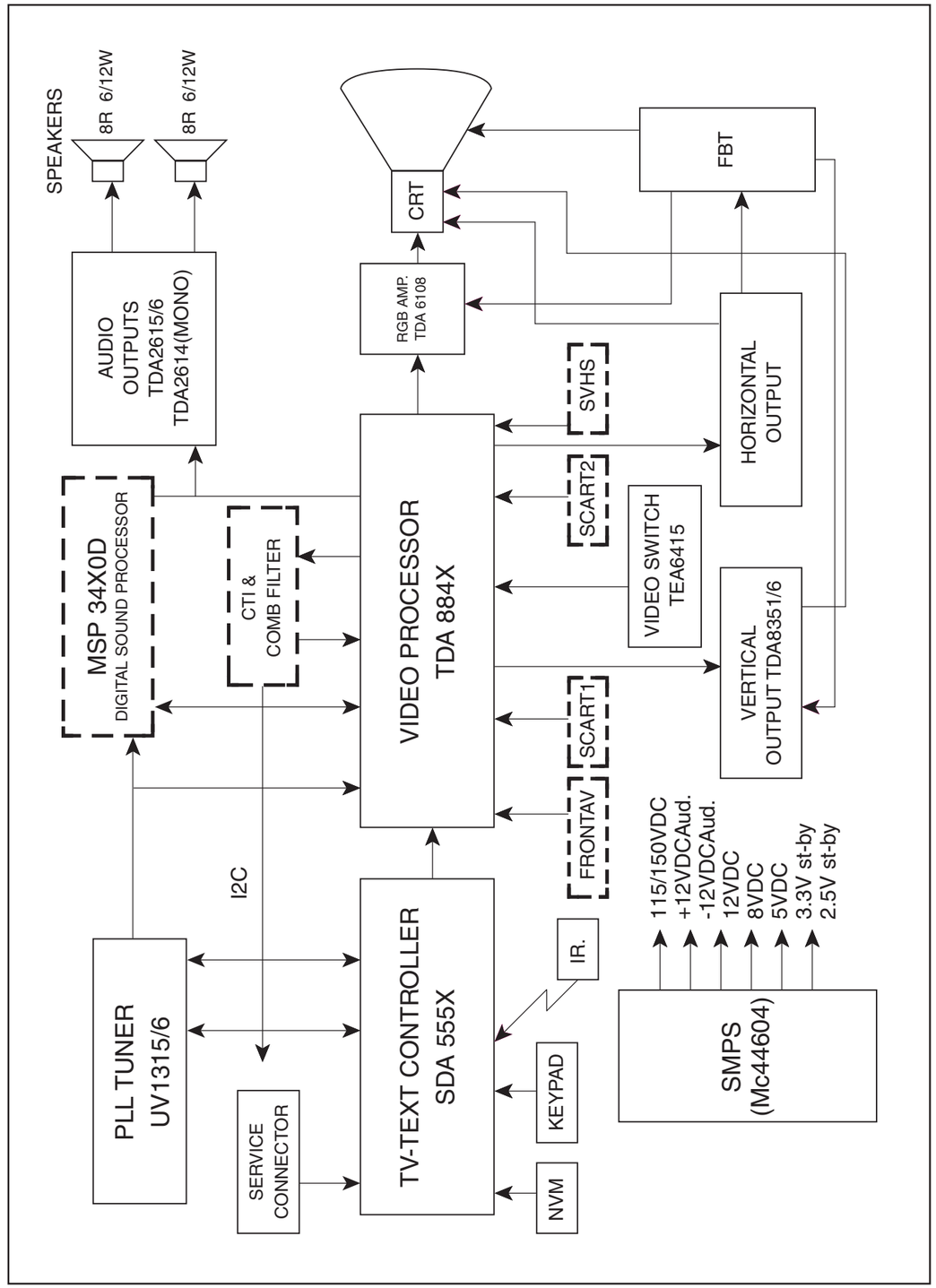
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

CHIP IC

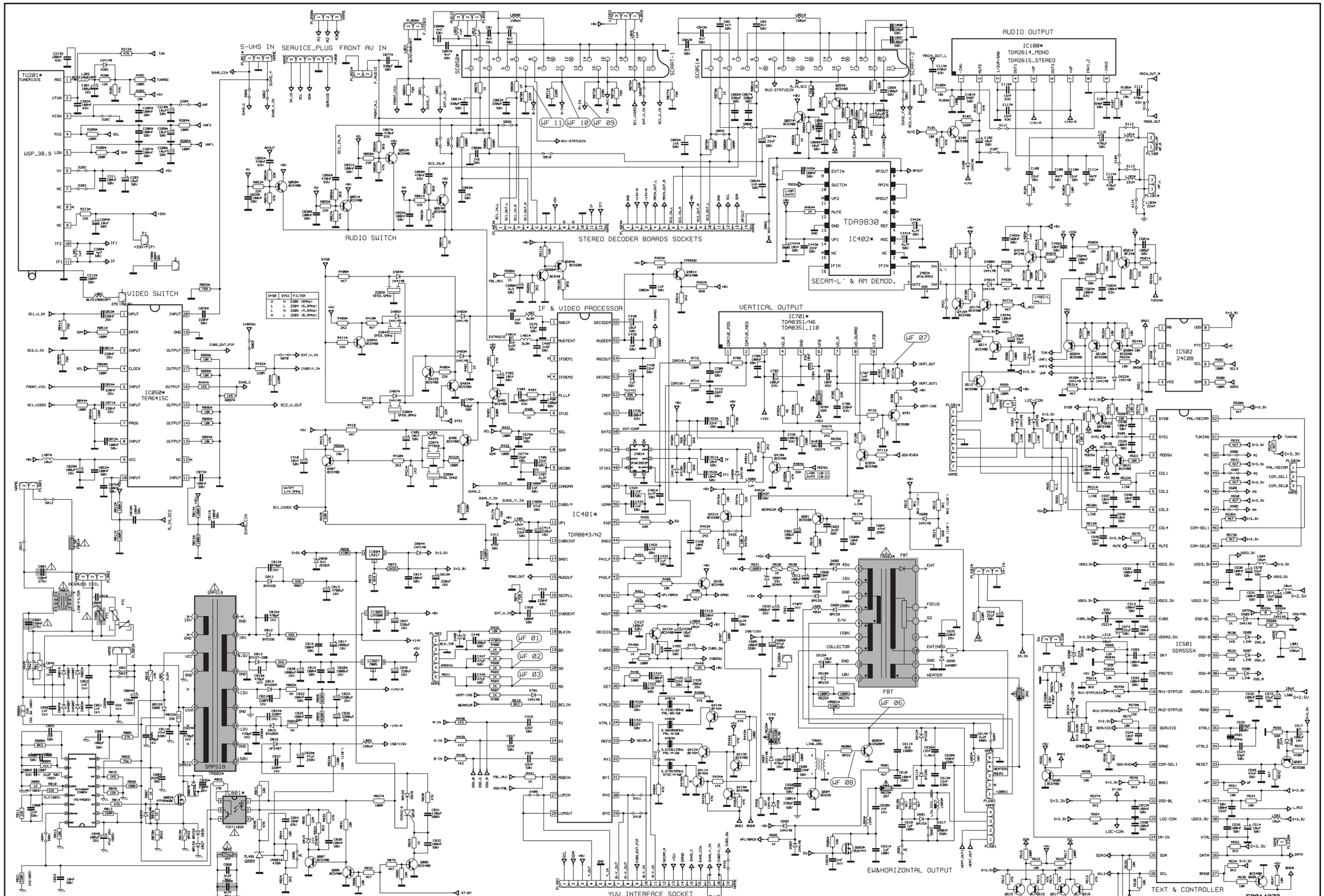
TOP VIEW		
		

BLOCK DIAGRAM



AV28BT7ENS / AV28BT7ENB
AV28BT7EES / AV28BT7EEB
AV28BT7EPS / AV28BT7EPB

CIRCUIT DIAGRAMS *MAIN PWB CIRCUIT DIAGRAM*

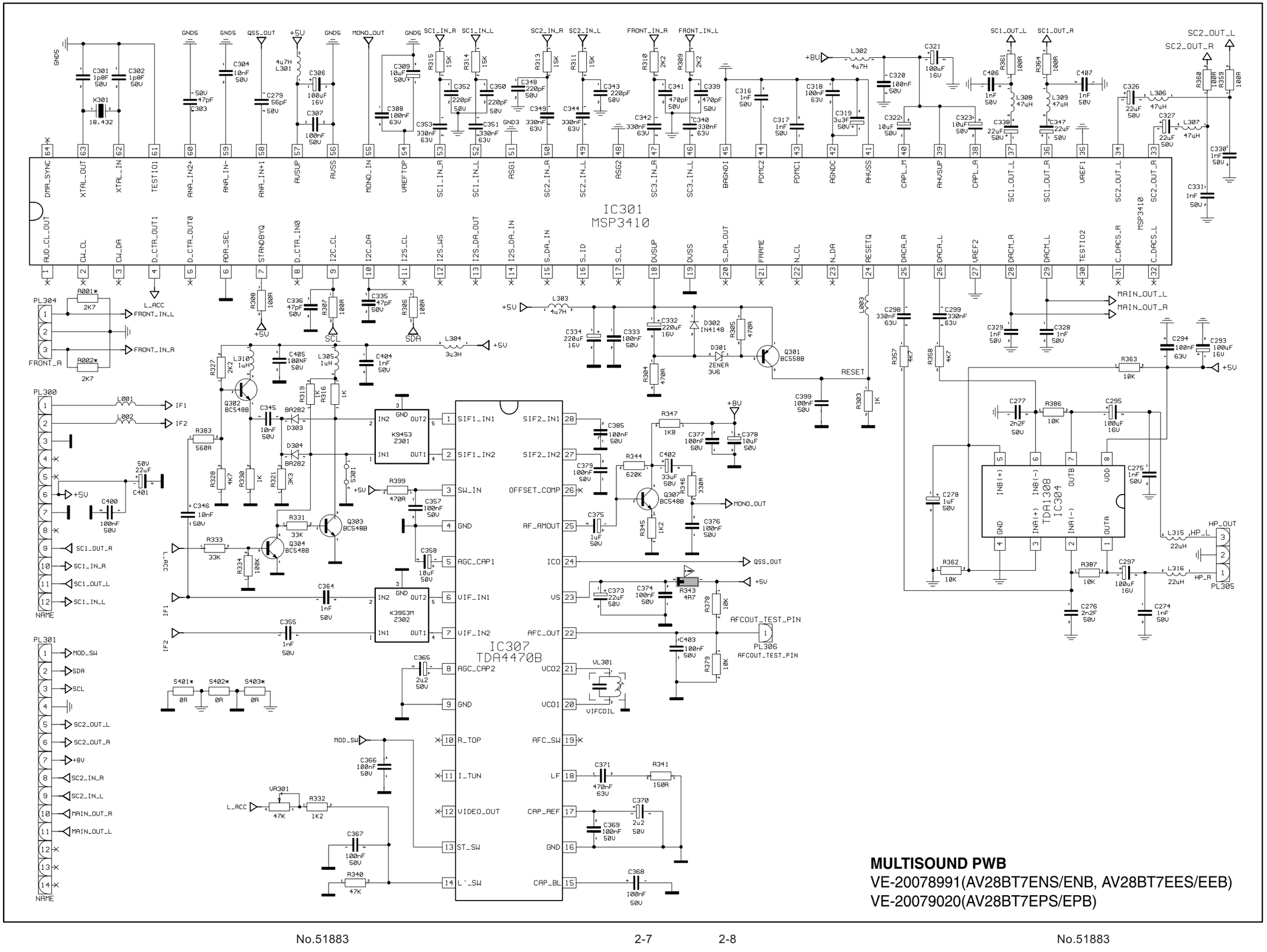


MAIN PWB

VE-20073447(AV28BT7EES/EEB) VE-20073586(AV28BT7ENS/ENB) VE-20071473(AV28BT7EPS/EPB)

AV28BT7ENS / AV28BT7ENB
AV28BT7EES / AV28BT7EEB
AV28BT7EPS / AV28BT7EPB

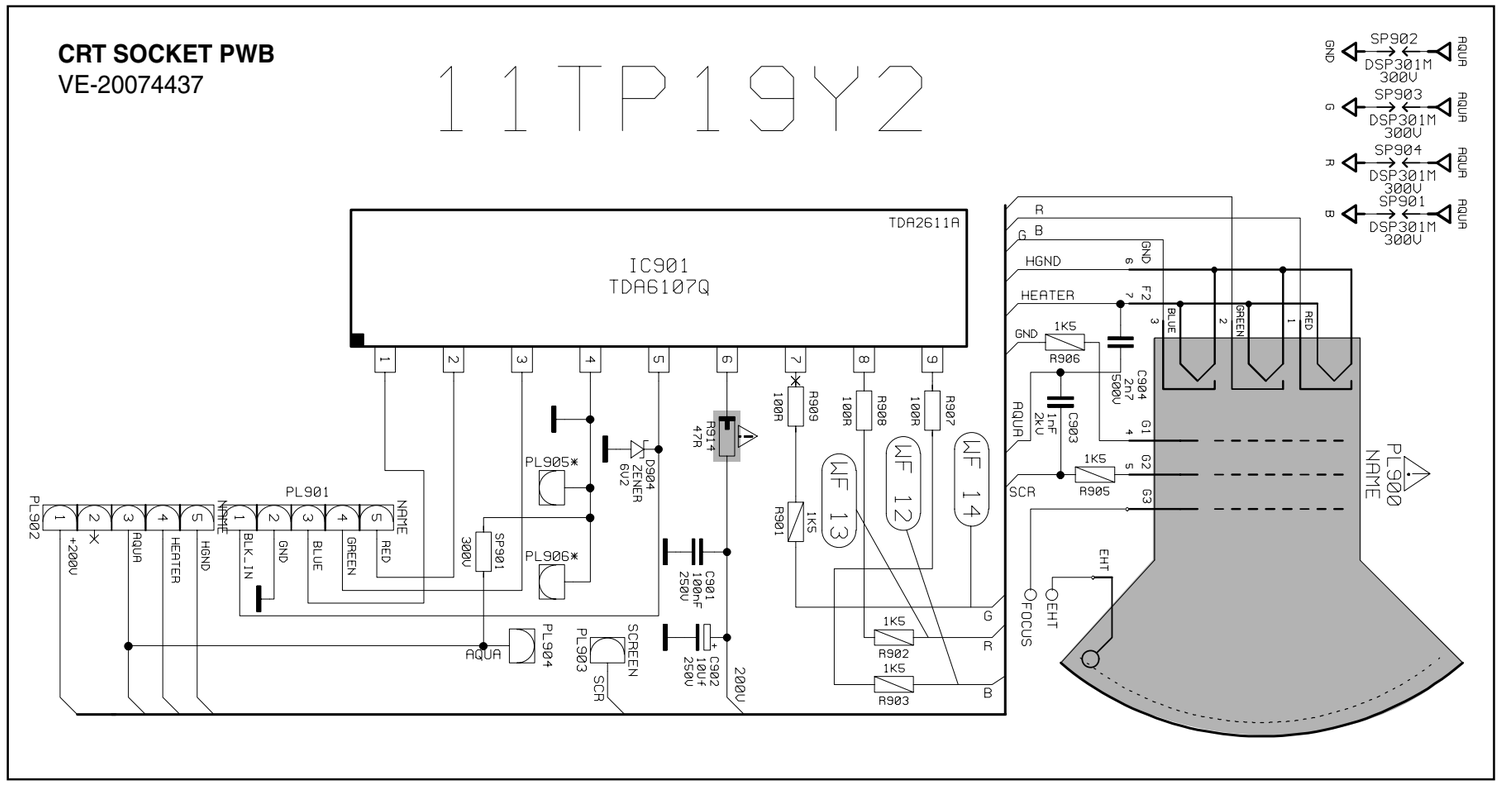
MULTISOUND PWB CIRCUIT DIAGRAM



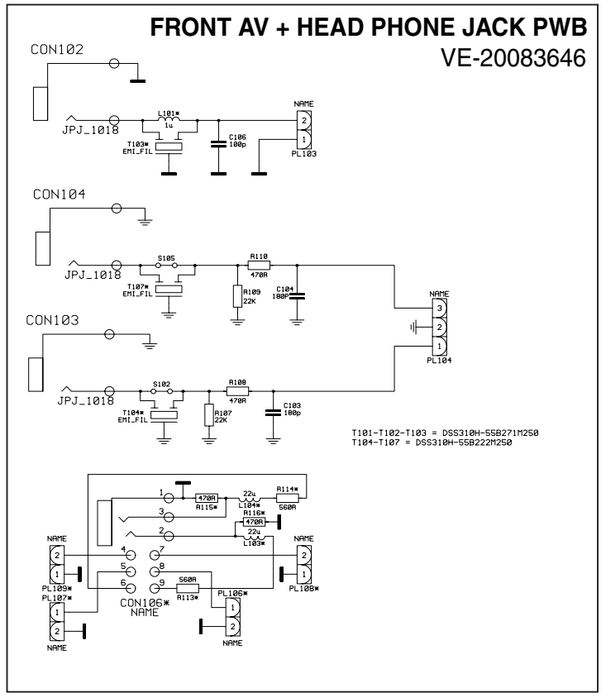
MULTISOUND PWB
VE-20078991(AV28BT7ENS/ENB, AV28BT7EES/EEB)
VE-20079020(AV28BT7EPS/EPB)

AV28BT7ENS / AV28BT7ENB
AV28BT7EES / AV28BT7EEB
AV28BT7EPS / AV28BT7EPB

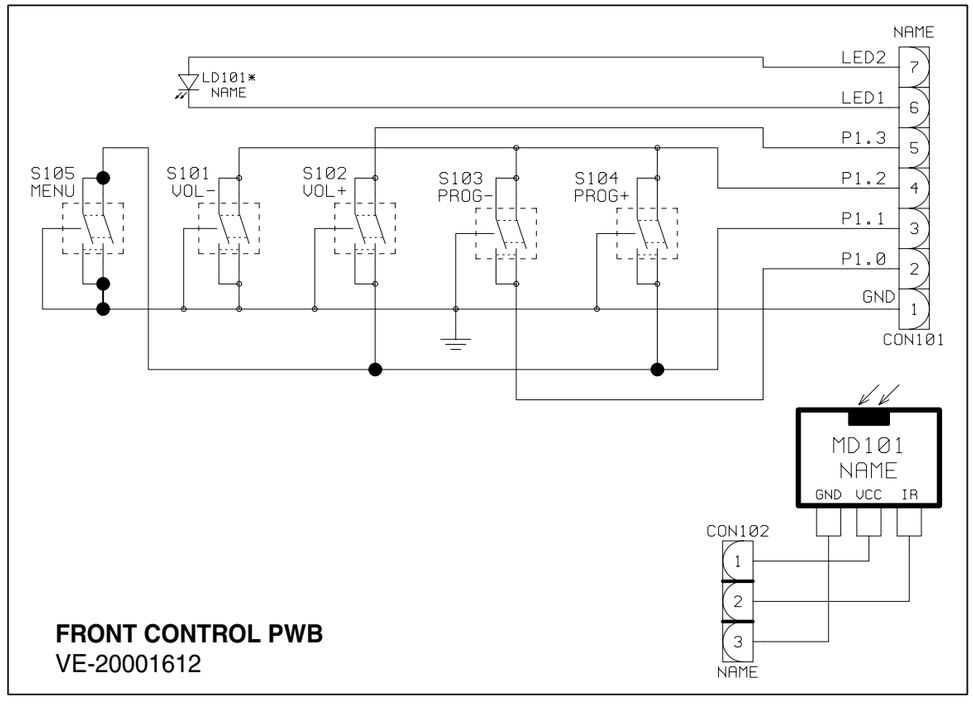
CRT SOCKET PWB CIRCUIT DIAGRAM



FRONT AV + HEAD PHONE JACK PWB CIRCUIT DIAGRAM



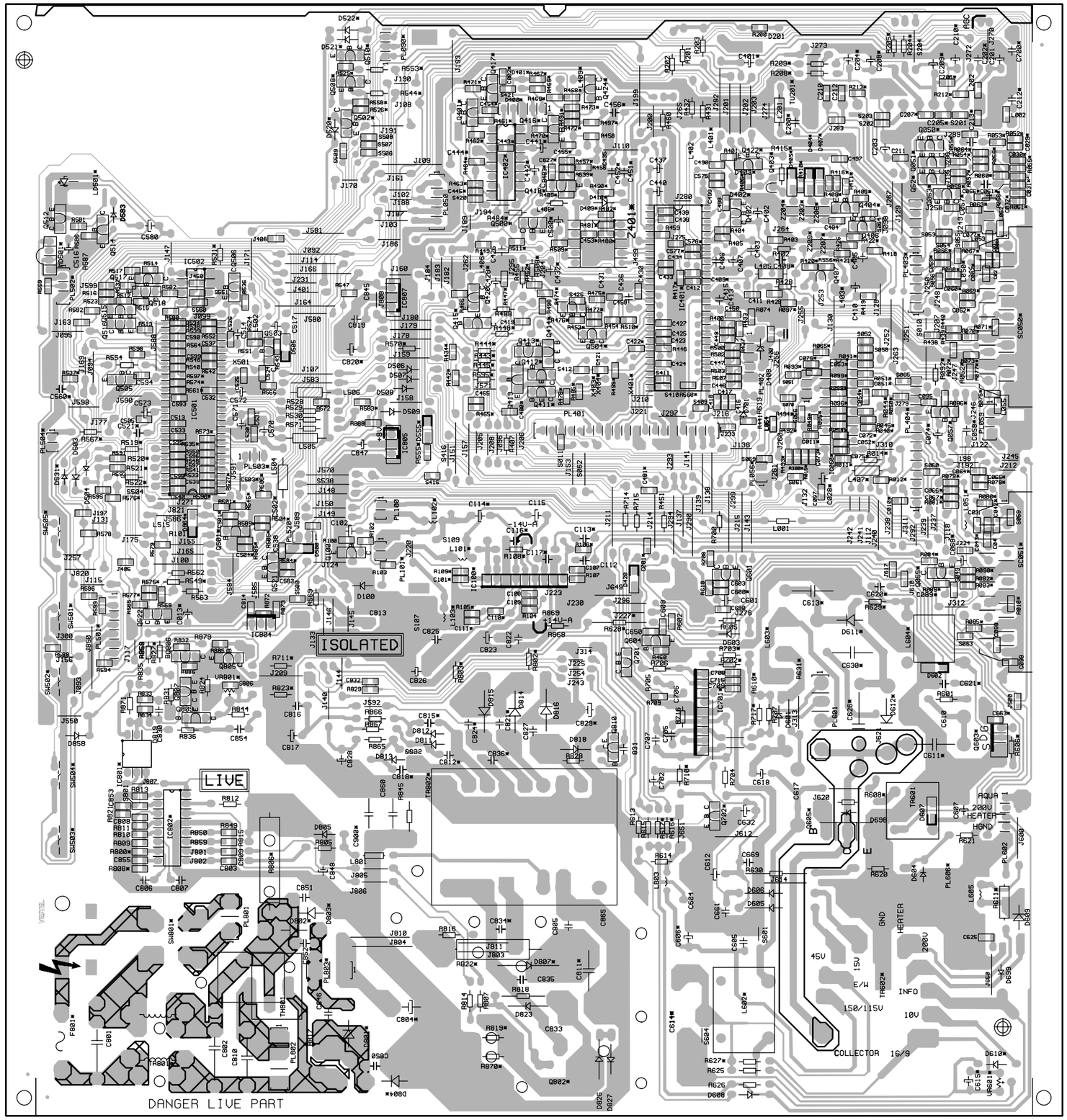
FRONT CONTROL PWB CIRCUIT DIAGRAM



AV28BT7ENS / AV28BT7ENB
AV28BT7EES / AV28BT7EEB
AV28BT7EPS / AV28BT7EPB

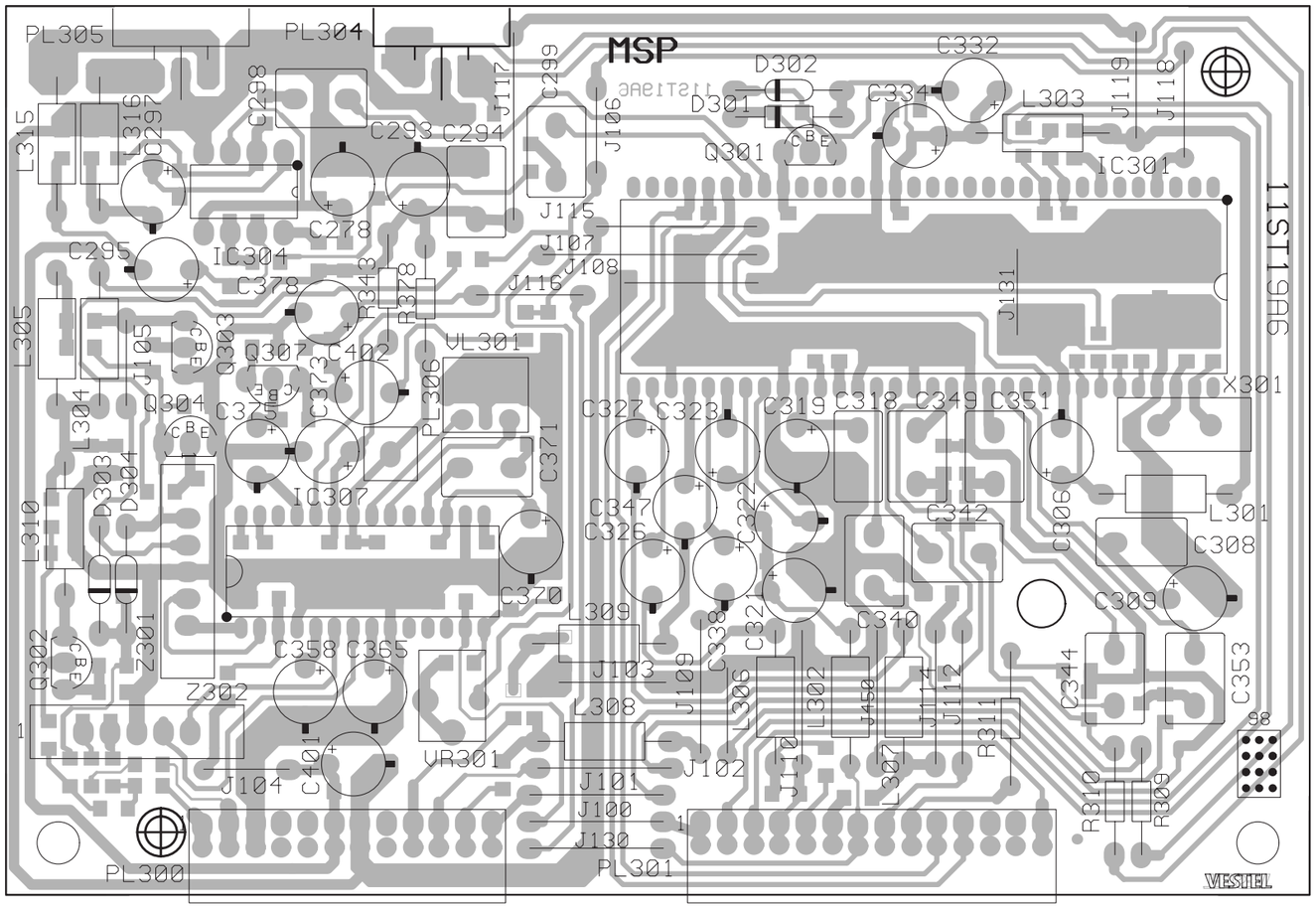
PATTERN DIAGRAMS *MAIN PWB PATTERN*

FRONT



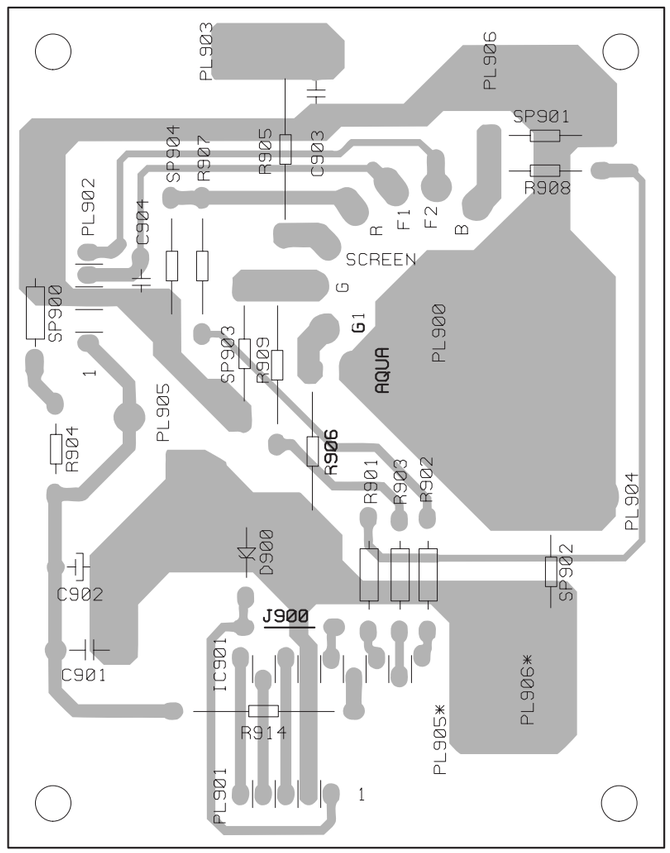
AV28BT7ENS / AV28BT7ENB
AV28BT7EES / AV28BT7EEB
AV28BT7EPS / AV28BT7EPB

MULTISOUND PWB PATTERN



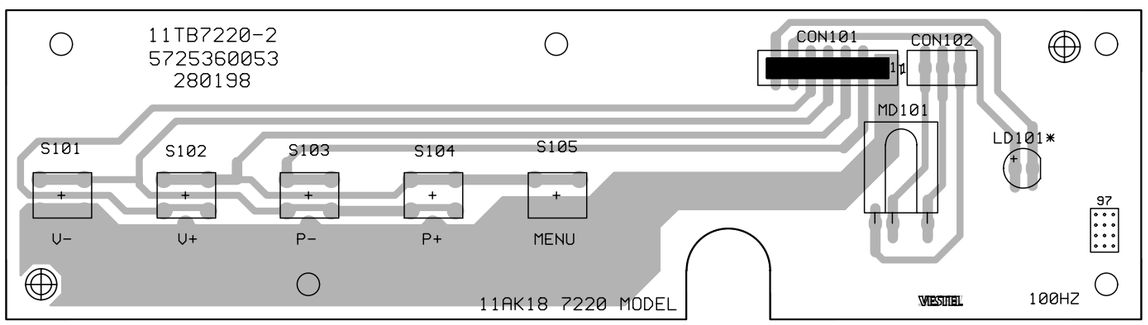
TOP

CRT SOCKET PWB PATTERN



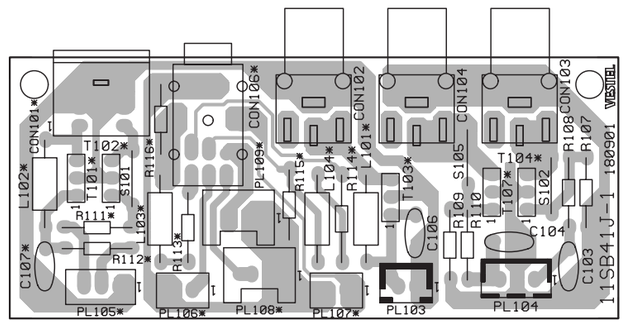
TOP

FRONT CONTROL PWB PATTERN
(PARTS SIDE)



TOP

FRONT AV + HEADPHONE JACK
PWB PATTERN



FRONT

AV28BT7ENS / AV28BT7ENB
AV28BT7EES / AV28BT7EEB
AV28BT7EPS / AV28BT7EPB

VOLTAGE TABLES

■ MAIN PWB

IC050

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2.8	11	3.0
2	4.5	12	0
3	2.9	13	4.0
4	4.8	14	2.8
5	2.9	15	4.0
6	3.2	16	4.0
7	0	17	4.0
8	2.9	18	4.0
9	7.9	19	0
10	4.0	20	3.7

IC401

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	0.3	29	2.4
2	3.7	30	2.4
3	0	31	2.4
4	0	32	2.4
5	2.5	33	0.3
6	3.0	34	2.5
7	4.5	35	2.5
8	4.5	36	4.7
9	6.7	37	7.8
10	0.1	38	2.8
11	3.7	39	5.0
12	7.8	40	0.1
13	4.0	41	0.9
14	0	42	3.1
15	3.0	43	4.0
16	0	44	0
17	3.7	45	3.0
18	5.4	46	2.3
19	3.5	47	2.3
20	3.1	48	4.6
21	3.4	49	4.6
22	2.1	50	2.0
23	3.5	51	3.8
24	3.5	52	3.8
25	3.5	53	4.3
26	0.1	54	2.3
27	3.0	55	2.9
28	3.0	56	3.3

IC801

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	12.5	4	2.6
2	11.5	5	12.4
3	0	6	0.1

IC802

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	12.4	9	0.8
2	12.1	10	2.6
3	0.1	11	2.3
4	0	12	0.2
5	0.9	13	3.0
6	0.1	14	2.4
7	0.2	15	2.6
8	0.2	16	2.4

IC804

PIN NO.	VOLTAGE
1	2.1
2	12.5
3	3.3

IC805

PIN NO.	VOLTAGE
1	12.4
2	0
3	7.9

IC807

PIN NO.	VOLTAGE
1	9.1
2	0
3	5

IC701

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2.3	6	45.2
2	2.3	7	7.7
3	15	8	0
4	7.5	9	7.5
5	0		

IC100

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	0	6	0
2	12.7	7	12.6
3	0	8	0
4	0	9	0
5	-12.6		

IC501

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	0	27	0
2	0	28	0
3	0	29	0
4	3.3	30	3.3
5	3.3	31	3.3
6	3.3	32	3.3
7	3.3	33	3.3
8	0	34	0.5
9	2.4	35	0.5
10	0	36	0
11	3.3	37	2.4
12	0.9	38	0.3
13	2.4	39	0.2
14	0	40	0.3
15	0.1	41	0
16	0	42	2.4
17	0	43	0
18	2.4	44	3.3
19	0.3	45	0
20	0.1	46	3.3
21	0	47	3.3
22	2.1	48	3.3
23	3.3	49	3.3
24	3.5	50	3.3
25	3.1	51	3.3
26	3.1	52	3.3

IC502

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	0	5	0.1
2	0	6	0.1
3	0	7	3.3
4	0	8	3.3

Note)
Although the symbol numbers of the level drive transistor and level output transistor are indicated as Q604 and Q606 on the wiring diagram, the numbers are indicated as Q601 and Q605 on the substrate, respectively. The following table shows the silk-printed symbol numbers on the substrate.

	E(D)	C(S)	B(G)
Q055	2.4	7.8	3.0
Q100	0	12.6	0
Q501	11.9	0	0
Q503	3.3	3.3	2.5
Q512	5.4	3.4	4.8
Q514	0	4.8	0
Q515	4.8	3.2	2.4
Q516	3.2	4.8	2.4
Q517	4.5	3.2	2.4
Q518	3.2	4.8	2.4
Q601	0	0	0.1
Q603	15.2	0	3.1
Q605	0	---	0
Q701	0.1	0	0.4
Q702	0	0	0.6
Q802	167	0	0.1
Q805	0	0	0.6
Q806	0	0	0.6
Q807	0	11.5	0

Q809
Cathode:11.3V
Anode:0V
Control terminal:2.4V

■ IF PWB

IC301

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2.5	33	3.7
2	0	34	3.7
3	0	35	0
4	4.9	36	3.7
5	0	37	3.7
6	0	38	6.8
7	4.9	39	7.8
8	0	40	6.5
9	4.5	41	0
10	4.5	42	3.6
11	2.4	43	3.7
12	2.4	44	3.7
13	2.4	45	0
14	0.1	46	3.7
15	0.1	47	3.7
16	0.1	48	0
17	0	49	3.7
18	4.8	50	3.7
19	0	51	0
20	0	52	3.7
21	0	53	3.7
22	0	54	2.6
23	0	55	3.7
24	4.9	56	0
25	0.1	57	4.9
26	0.1	58	0.1
27	0	59	0.1
28	0	60	0.1
29	0	61	0
30	0	62	2.3
31	0	63	2.3
32	0	64	0

IC304

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2.4	5	4.9
2	2.4	6	2.4
3	2.4	7	2.4
4	0	8	2.4

IC307

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	3.2	15	0.1
2	3.2	16	0
3	4.9	17	4.3
4	0	18	3.0
5	0.1	19	3.5
6	2.4	20	3.3
7	2.4	21	3.3
8	2.2	22	3.3
9	0	23	3.5
10	2.7	24	4.5
11	0	25	0
12	2.1	26	3.4
13	5.0	27	0.1
14	0	28	0.1

	E(D)	C(S)	B(G)
Q301	4.8	4.8	4.1

■ CRT SOCKET PWB

IC901

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	3.2	6	0.1
2	2.9	7	0.1
3	3.2	8	0.1
4	0	9	0.1
5	6.0		

AV28BT7ENS / AV28BT7ENB
AV28BT7EES / AV28BT7EEB
AV28BT7EPS / AV28BT7EPB

JVC

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